

THE CULTIVATOR.

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THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

THE CREDIT SYSTEM.

By the advice of several friends, we were induced to give notice in our December No. of last year, that we should send the present volume of the Cultivator to all our old subscribers, unless orders were received for their discontinuance. We find, however, from the short trial we have made, that the "credit system" will not answer our purpose. Our Agents in all parts of the country object strongly to it, as they assure us that very many of the subscribers, finding that they receive the paper regularly, will neglect to pay for it till their bills are presented, which would give them more trouble than they can afford to take. The Cultivator is published at so low a price that it will not enable us to employ traveling collectors; and it is too heavy a tax on our friends to ask them to collect our bills. We have therefore come to the conclusion to resume the "CASH SYSTEM," and hereby give notice that we shall hereafter send the Cultivator only to such as have complied with our terms by paying in advance for it, as we believe this will be the best course in the long run, not only for ourselves, but also for our agents and subscribers. Those, therefore, who wish the paper continued to them, should immediately hand their dollar to the person acting as agent in their neighborhood—or what would be better, we should be glad to have each subscriber act as agent, and obtain subscribers enough to enable him to remit us a \$5 bill.

THE VERMONT OAT CROP.

In our last vol., p. 192, we gave an account of a crop of oats grown on four acres, by D. JUNE, Esq., of Brandon, Vermont, which produced 588 st oks, of 12 bundles each. It will be seen by the following letter from Mr. June, that he has since thrashed, measured, and weighed the oats, and that the four acres produced 514 bushels and twenty quarts, being an average of 128 bushels 21 quarts to the acre. Who can equal, not to say beat, this?

BRANDON, VT., Jan. 22, 1842.

MESSEES. GAYLORD & TUCKER—Having been requested to communicate the result of my oat crop, and manner of cultivation, to your paper, as it has an extensive circulation among the farming community, I would state that the land was pastured several years previous; in the season of 1839, it was plowed up in the sward, (the soil black muck;) in the month of May, 1840, it was thoroughly tilled, harrowed down smooth, then twenty loads of good manure spread to the acre, and plowed in to the depth of four inches, and harrowed; then planted to potatoes. In the spring of 1841, the land was plowed once, four inches deep, which made it very light and mellow; the 16th of May, I sowed sixteen bushels of barley oats on the four acres. I reaped 588 stooks of 12 bundles to the stook, from the four acres; having thrashed and measured them in the half bushel, (not by the stook or load,) the result is 514 bushels 20 quarts, making 128 bushels 21 quarts to the acre, and weighing 36 lbs. to the bushel.

DRANCES JUNE.

WE should be glad to engage the services of a few respectable and trustworthy men, as traveling agents for the Cultivator.

ANNUAL MEETING OF THE N. Y. S. AG. SOCIETY.

THE annual meeting of the New-York State Agricultural Society was held at the Exchange in the city of Albany, agreeably to notice, on the 19th of January, and was numerously and respectfully attended. The exhibition of agricultural products for premiums, took place the day previous, the 18th, and though the specimens were not as numerous as could have been wished, or as may be expected hereafter, they were such as to furnish much encouragement to the friends of agricultural industry, and prove most satisfactorily the advances made within a few years in the improved system of husbandry.

Premiums were awarded as follows:

- On BUTTER:
1st—\$30—to J. T. Lansing, Watervliet.
2d—\$20—to William Merrifield, Guilderland.
3d—\$10—to Charles Lyon, Ogdensburgh.
- On CHEESE:
1st—\$20—to H. & P. Allen, Duaneburgh.
2d—\$10—to Daniel Marvin, Cooperstown.
3d—\$8—to Phineas Hardy, Le Ray.
- On WHEAT:
1st—\$20—to George Shaeffer, Wheatland.
- On BARLEY:
1st—\$15—to J. N. Tunncliffe, Richfield.
- On INDIAN CORN:
1st—\$20—to William Ingolls, Volney.
2d—\$10—to J. F. Osborn, Port Byron.
- On OATS:
1st—\$15—to D. W. Weeks, Watertown.
2d—\$8—to John S. Jones, East Bloomfield.
3d—\$5—to Amos A. Eggleston, Greenwich.
- On POTATOES:
1st—\$15—to Phineas Hardy, Le Ray.
2d—\$8—to H. D. Grove, Hoosick.
- On RUTA BAGAS:
1st—\$15—to W. B. Ludlow, Esq., Claverack.
2d—\$8—to George Shaeffer, Wheatland.
- On SUGAR BEETS:
1st—\$15—to S. B. Vail, Greenport.

The proceedings of the Society were conducted with the greatest harmony and good feeling; and in the review of what the Society had accomplished the past year, it was found there was abundant cause for gratulation. The manner in which the efforts of the Executive Committee had been seconded by the farmers in almost every section of the State, proved the interest felt in the association, their confidence in the beneficial results that would follow the organization and success of the Society, and their willingness, when properly appealed to, to sustain it by contributions to its funds. The best spirit was every where manifested; and all present seemed to feel that the year 1841 had opened a new and auspicious era in the history of New-York agriculture. It was felt that the principal difficulties in the way of the Society have been met and surmounted, and that the success which had attended its efforts was a most triumphant reply to the objections which a few had made to the utility of such associations.

The address of the president, which was able and interesting, was delivered to a large audience on the evening of the 19th. As it will be published and read with interest and instruction, no farther reference will be necessary in this place.

The Report of the Executive Committee, which is to be made to the Secretary of State, will, we are confident, when it is laid before the public, be found one of the most truly valuable Reports ever submitted to the State Government. Should the anticipations of the friends of the Society be realized in its continued existence and usefulness, the Annual Reports which the law makes it necessary for the Society to present, will present a faithful record of the progress of agriculture in the State, and a mass of authentic facts, such as have not yet been embraced in the agricultural history of the United States.

The proceedings were closed by an Agricultural Supper at the City Hotel, served in the usual good taste of Mr. Foster, which was attended by a number of invited guests, among whom were the Governor of the State, several members of the Legislature, and others. JOEL B. NOTT, Esq., the late president of the Society, presided. In the course of the evening, Gov. SEWARD, Rev. Mr. COLMAN, Gen. LELAND of the Assembly, Alderman JOY, Dr. BECKMAN of Columbia, Judge VAN BERGEN of Greene, MESSRS. WALSH and VIELE of Rensselaer, JOHNSON of Oneida, CALDWELL of Orange, and RANDALL of Cortland, responded to the calls made upon them to address the company. The speeches of the

Governor and Mr. Colman are spoken of as efforts of the happiest character. At one o'clock, the company separated, well pleased with their day's labor and evening's entertainment, and with a renewed determination to make the New-York State Agricultural Society worthy the character of the Empire State.

LETTER FROM AN AMERICAN IN ENGLAND.

By the Britannia steamer, which arrived at Boston on the 22d ult., we received the following letter from our friend, T. C. PETERS, Esq., president of the Genesee County Agricultural Society in this State, who is now on a visit to Great Britain:

LONDON, December 20th, 1841.

MESSEES. GAYLORD & TUCKER—I have been so entirely busy since my arrival in this country, that I have not had time to fulfill my promise to you till this moment. Even now I have so much upon my mind of the cares incident to business, that fear I shall not be able to make a letter at all interesting.

I have seen the country at a very bad season of the year. It has rained almost every day since I landed; but even with all that disadvantage, I can see that it is a beautiful country. And its farming is but an enlarged system of gardening. In many things connected with agriculture, they are decidedly superior to us; and in no one thing more than in the great attention and care they bestow upon their land. No man can farm successfully here without considerable capital over and above his farm stock. Without that, the farmer could do but little towards manuring, which is a great expense. I have been shown farms where the outlay for manure alone was equal to \$50 per acre he first year.

As an agricultural people, we are not thirty years behind the people here, and should I live to the common age of man, I expect to see my country fully equal to any thing in Europe for the perfection of its agriculture. We have but to will, and it is done. Let us thoroughly work our own farms, bestowing upon them all our care and attention, encourage agricultural societies and publications, and aim to make our dwellings pleasant, by spending an occasional hour in the proper season, in planting around them trees and shrubs, and it will be but a few years before our country will present an appearance superior to any thing abroad, poets and tourists to the contrary notwithstanding. You see nowhere the same life and activity in the landscape here, as you see with us. It is generally one of sweet repose. You miss the numerous farm houses and comfortable barns and out houses, which are scattered thickly over the country with us, giving it the appearance of life and thriving industry. I am in favor of our fences, as compared to the hedges and ditches, which are used everywhere here. I think a good rail fence is far more sightly than a great majority of the hedges in Ireland and this country. It is true, they may not look so beautiful to a stranger, unaccustomed to country life; but I should feel far more secure if my fields were enclosed with a good rail fence, than the best hedge which I have seen in this kingdom. At some time, I make no doubt, hedges will become necessary with us, and perhaps it is worthy of the attention of agricultural societies to endeavor to ascertain the best tree or shrub for quick fences. But when other materials are reasonably cheap, I would never trouble with a hedge.

In making butter and cheese, and preserving them in good condition for market, we are immeasurably behind the English, Dutch, and indeed all the better parts of agricultural Europe. I have devoted a good deal of time and attention to their butter and cheese here, having been through some of the best dairy regions of Ireland and Great Britain; and I am satisfied there is no good reason why we should not make as good as their best. I have examined the cheese, which has been sent over here from the United States, side by side with English and Dutch cheese: some of it is acknowledged to be equal to their best. A large portion of it, however, is very poor, even worse than the Dutch or Welsh. There are two prominent defects which might be easily remedied; and that done, we might send a large quantity into this market, at a fair profit. At present, it is no use to ship cheese, because it cannot be sold at a remunerating price. One objection to our cheese is, that it is too thin and flat. They should be made in deeper hoops. A cheese weighing from twenty-five to thirty pounds, ought not to exceed thirteen inches in diameter, and should be from five to seven or even eight inches thick. It is an object with the people here to get as much as they can in as small a surface as possible. Our flat cheeses present quite too much outside for the weight. Cheese weighing about forty pounds, when well cured, is the best size, and most preferred, and it should not be less than six inches thick. Another defect is in the making and curing. They prefer a rich mild flavored cheese, that will not crumble in cutting; ours is too strong of the rennet, and not as rich as it would be, if the farmer sold less butter. The whey should all be pressed out, and the cheese well cured, so that it would keep its shape any length of time. Great care should be taken to make all of the same dairy, as uniform in taste and appearance as possible. In fine, if the farmer wishes to have a ready market at home, he must make his cheese deeper and narrower, and mild flavored, and it must be rich and well cured, and keep its shape. My own impression is, that none but the best Liverpool salt should be used.

I find I have no room left for remarks on butter, which perhaps your readers will not regret. I did not get up here in time to attend the Smithfield Cattle Show. Sincerely yours, T. C. PETERS.

COMPARATIVE PRICE OF WHEAT IN ENGLAND AND NEW-YORK.—It appears from a report lately made to the house of commons, that during the five consecutive years from 1834 to 1839, wheat was only one shilling and two pence higher in England than in New-York, the average per quarter at the two places being as follows:

New-York,.....	49s. 10d.
England,.....	51s.

New-York State Agricultural Society.

EXHIBITION OF BUTTER, CHEESE, &c.

THE exhibition of Butter, Cheese, &c. offered for the Premiums of the Society, was held in Albany, on the 18th of January, 1842. The show of every thing but Butter, was small. Of Butter, twenty lots, from different parts of the State, amounting to over 2,600 lbs., were exhibited. Of Cheese, only six lots were presented, amounting, however, to about 2,000 lbs. There were but three competitors for the premiums on Wheat—five on Oats—two on Indian Corn—two on Barley—four on Potatoes—three on Ruta Bagas—two on Sugar Beets—one on Carrots.

REPORT OF COMMITTEE ON BUTTER.

The committee to examine and award premiums on butter, beg leave to offer the following report:

There were twenty applicants for premiums, and the whole quantity of butter sent in for exhibition was about 2,600 lbs., the quality uniformly good, and generally put up with much neatness, highly creditable to the contributors.

The committee unanimously award the
1st premium, \$30, to J. T. Lansing of Watervliet.
2d " 20, to William Merrifield of Guiderland.
3d " 10, to Charles Lyon of Ogdensburgh.

The annexed statements from the successful competitors, give their several modes of making butter.

ALEX. WALSH, GEORGE VAIL,
ROBERT DENNISTON, W. B. WALTON,
J. M. SHERWOOD.

MR. LANSING'S STATEMENT.

1. The number of cows kept is ten.
2. Keep them stabled through the inclement season; feed them from three to four times per day with good hay or green stalks; when near coming in, add some oats, barley, or corn cracked. In summer, good pasture, with living water accessible at all times, and plenty of salt.

3. Treatment of milk and cream before churning.—Strain the milk in tin pans; place them in a cool cellar for the cream to rise. When sufficiently risen, separate the cream from the milk; put it in stone jars, well prepared, before churning.

4. The mode of churning in summer.—Rinse the churn with cold water; then turn in the cream, and add to each jar of cream put in churn full one-fourth of the same quantity of cold water. The churn used is a patent one, moved by hand with a crank, having paddles attached, and so constructed as to warm the milk, if too cold, with hot water, without mixing them together. The milk and cream receive the same treatment in winter as in summer; and in churning, use hot instead of cold water, if necessary.

5. The method of freeing the butter from the milk, is to wash the butter with cold water till it shows no color of the milk, by the use of a ladle.

6. Salting of the butter.—Use the best kind of Liverpool sack salt; the quantity varies according to the state in which the butter is taken from the churn—if soft, more, if hard, less, always taking the taste for the surest guide. Add no saltpetre nor other substances.

7. The best time for churning is the morning, in hot weather, and to keep the butter cool till put down.

8. The best mode of preserving butter in and through the summer and winter, is as follows:—The vessel is a stone jar, clean and sweet. The mode of putting it down is to put in a churning of butter, and put on strong brine; let it remain on till the next churning is ready to put down, and so on till the jar is filled; then cover it over with fine salt, the same to remain on till used.

Waterliet, Jan., 1842. JACOB T. LANSING.

MR. MERRIFIELD'S STATEMENT.

Number of cows.—Eight.
Mode of keeping.—In pasture, in summer; on hay, straw, and roots, in winter.

Treatment of cream and milk.—Milk strained into tin pans, and placed in the cellar.

Mode of churning.—The cream only churned, in a Dutch churn.

Method of freeing the butter from the milk.—By pressure.

Quantity and kind of salt.—Liverpool sack, one ounce to the pound.

Best time of churning.—Morning, in summer.

Best mode of keeping.—In the cellar, in summer, in wood.

In winter, our milk stands twelve hours; is then removed to the stove, and scalded over a slow fire to near boiling heat; the pans removed to the cellar to cool; the cream only churned. The butter, placed in the coldest part of the house, will keep good any length of time.

Guiderland, Jan., 1842. WILLIAM MERRIFIELD.

MR. LYON'S STATEMENT

TO THE COMMITTEE FOR THE EXAMINATION OF BUTTER.—In submitting to your consideration the following report, I would remark that at the time of my leaving home, I had no intention of entering the list of competitors, and that the tub of butter exhibited for your inspection was manufactured without any reference whatever to this exhibition—was made during my absence from home, in our ordinary way of making butter. My soil is a sand, heavy pine ridge, on which clover

grows luxuriantly, and part black loam, and part clay, nearly equal in proportion, sloping westwardly. With the exception of five or six weeks in the season, water may be found plenty in my pastures; during the dry seasons, my cows have access to water morning and evening, and at mid day, if they choose. My hours for milking are very regular, viz: commencing at early light in the morning, and in time to get through before dark in the evening. My dairy numbers twenty cows, seven of which were milked for the first time this season—their age three years old: the ages of the remainder average from five to ten years. I fattened all my calves to the age of six weeks. The latter part of winter and through the spring, my cows are fed about one peck of ruta bagas each; salted regularly once a week in winter, and twice in summer. I think salting regularly, as often as above stated, to be very essential, as conducive to good health; and during the milking season, tends to produce a uniformity in the quantity of milk, and in my estimation, adds in no small degree to the quality of the milk. The average product of my cows this season is 100 lbs. per cow, besides what I have used in a family of from eight to ten persons. My milk house is what is termed a plank building, clap-boarded; ceiled about three feet from the floor; the remainder of the room lath and plastered. My shelves about six inches wide and five between, so constructed as to admit a free circulation of air. My buildings are on a rise of ground of sufficient height so as not to require drains to my cellars. I have a cellar under my milk house the entire size of my building, with wall of round stone, laid without mortar, to the depth of six feet. In the center of the building, I have a place about three feet square, to admit the cool air from the cellar, over which I have a table, where the milk is strained, butter worked, &c. &c. The milk I required to be strained as soon as possible after milking, in tin pans, about three quarts to each pan; it stands until the milk is slightly turned, the time required depending on the temperature of the weather.

Churning performed every day, (Sundays excepted.) I would here remark, when cows are regularly salted, as I have before stated, I have never known an instance of any extreme difficulty in obtaining butter. After it is obtained, is immediately taken from the buttermilk, all the milk worked off that is practicable at the time, (which in some respect depends upon the temperature of the weather), salted to the taste, and placed in a cool cellar until the next day, when the buttermilk is entirely worked out by the use of a ladle, and then packed solid in tubs.

The kind of salt I use is obtained in Albany, and goes by the name of sack salt, in parcels weighing from 200 to 300 lbs. After the tub is filled, the butter is kept covered with brine sufficient to keep the air entirely excluded, especially that made during the warm part of the season. My tubs are placed in the coolest part of my cellar. Butter made and protected in this way, I have no hesitation in saying, will keep sweet one, two, or three years.

CHAS. LYON.
Oswegatchie, St. Lawrence Co., Jan., 1842.

REPORT ON CHEESE.

The Committee on Cheese have attended to the duties assigned them, and beg leave to offer the following report:

There were only five specimens of cheese presented for premium, that came within the rules of the Society. The cheese was generally of good quality, and alike creditable to the contributors and to the Society; but your committee regret to say the number of competitors was small, and a reflection on our dairy counties, which are so distinguished for the qualities of their cheese.

The specimen of D. Marvin was very good, and the committee had some hesitation in deciding the comparative excellence of this and that of H. & P. Allen of Duaneburgh, and finally decided in favor of the latter, as entitled to the Society's first premium of \$20, upon the fact that this was rather the most mild and uniform in taste and flavor.

Your committee did not hesitate to award the second premium, of \$10, to D. Marvin of Cooperstown.

The other samples were very good, but were not of so even a quality, nor uniform in flavor; and as there was no entry for old cheese, that came within the rules of the Society, your committee would beg leave to recommend a gratuitous premium of \$5 to Phineas Hardy of Le Ray, for a sample which they considered very fine, and deserving particular notice.

In closing this report, your committee cannot help expressing their regret that in sections where they know so much good cheese is made, there should be so limited a number of competitors for the very liberal premiums offered by this Society. If the reward offered was the only motive for bringing forth these articles, the reason might be found in the little regard in the chastened minds of the community for that which many others have coveted; but when it is recollected that the great object of these exhibitions is to communicate and receive information on subjects of great interest to all, we cannot but think that the grand and high principles which actuate worthy citizens, should lead them, by the exhibition of their own successful manufactures, to instruct, stimulate, and encourage those less informed than themselves.

Your committee consider a well managed dairy one of the most valuable sources of a farmer's revenue. The product of a good cow, for a single season, in milk, butter, cheese, &c. may be safely estimated at more than thirty dollars.

We forbear to give particular directions for making cheese, referring you to the annexed statements of the competitors, whose success in obtaining the Society's premiums is the highest recommendation of the method pursued by them.

C. N. BEMENT, P. N. RUST,
E. R. SATTERLEE, B. P. JOHNSON.

MESSRS. ALLEN'S STATEMENT.

Number of cows kept, eleven. Cheese made from two milkings, in the English manner; no addition made of cream. For a cheese of twenty pounds, a piece of rennet about two inches square is soaked about twelve hours in one pint of water. As rennets differ much in quality, enough should be used to coagulate the milk sufficiently in about forty minutes. No salt is put into the cheese, nor any on the outside during the first six or eight hours it is being pressed; but a thin coat of fine Liverpool salt is kept on the outside during the remainder of the time it remains in press. The cheeses are pressed forty-eight hours under a weight of seven or eight cwt. Nothing more is required but to turn the cheeses once a day on the shelves.

H. & P. ALLEN.
Duaneburgh, Jan. 17, 1842.

MR. MARVIN'S STATEMENT.

The milk strained in large tubs over night; the cream stirred in milk, and in morning strained in same tub; milk heated to natural heat; add color and rennet; curd broke fine and whey off, and broke fine in hoop with fast bottom, and put in strainer; pressed twelve hours; then taken from hoop, and salt rubbed on the surface; then put in hoop, without strainer, and pressed forty-eight hours; then put on tables, and salt rubbed on surface, and remain in salt six days, for cheese weighing thirty pounds. The hoops to have holes in the bottom; the crushings are saved, and set and churned, to grease the cheese. The above method is for making one cheese per day.

DANIEL MARVIN.
Cooperstown, January, 1842.

MR. HARDY'S STATEMENT.

The number of cows kept is thirty-eight. Cheese made from two milkings—no addition of cream. The quantity of salt used was one tea-cupful to twenty pounds of curd, of common Onondaga salt. The rennet was prepared by soaking one rennet in a jar of five or six quarts, filled with salt and water. From one pint to one quart was used, according to the strength of the rennet, for a cheese of eighty or ninety pounds. The cheeses were pressed in a common wheel and lever press, and pressed two days. The cheeses were taken from the press, and rubbed with annatto, soaked in strong ley; then rubbed with whey butter, and turned and rubbed daily through the season with the same.

PHINEAS HARDY.
Le Ray, Jefferson Co., Jan. 10, 1842.

REPORT ON WHEAT, RYE, AND BARLEY.

The committee on wheat, rye, and barley, beg leave to report:

That they exceedingly regret that they have been compelled to reject several applications for premiums, because the terms of the executive committee were not complied with. They regret it the more, because some of them would no doubt have received premiums—among whom were Elisha Pettibone, James Beatty, applicants for the premium on wheat, and Jay Pettibone for barley.

The first premium on wheat is awarded to George Schaffer of Wheatland, Monroe co., provided he amends his statement by furnishing, on oath, an actual survey of the lot. The amount of wheat raised was 300 bushels on 7 1-2 acres, averaging 40 bushels to the acre.

The first premium on barley to John W. Turnnelliffe, Richfield, Otsego co., one acre yielding 53 1-4 bushels of barley. The whole expense of raising this acre of barley is estimated at \$12 50.

The committee are desirous of expressing their thanks to the competitors for the above premiums. Their example is in the highest degree praiseworthy. They regret exceedingly that in so large a grain growing State, so few men could be found who either deserved or were desirous of obtaining the premiums of the State Society.

ANTHONY VAN BERGEN, OLcott C. CHAMBERLIN,
W. FULLER, O. HUNGERFORD,
JOHN B. DILL.

REPORT ON CORN, OATS, AND PEAS.

The committee appointed to examine and award premiums on corn, oats, and peas, beg leave to report:

That they entered upon the duties assigned to them, and have first to express their regret that the applications for premiums were not more numerous.

There were two applicants for premiums on corn, and your committee regret that the statements accompanying the applications were not more explicit, complying more strictly with the rules of the Society, as much useful information might be derived therefrom.

They award the first premium of \$20 to William Ingalls of Volney, Oswego county, for raising 142 bushels measure of shelled corn on one acre of land.

And the second premium of \$10 to J. F. Osborn of Cayuga county, for raising 144 bushels, weight 56 lbs. to the bushel, on one acre of land; but the mode of ascertaining the quantity was not wholly satisfactory to the committee.

There were five competitors for oats, all very highly deserving of commendation.

They award the first premium of \$15 to D. W. Weeks of Watertown, Jefferson co., for raising 113 1-2 bushels on one acre of land.

They award the second premium of \$8 to John S. Jones of East Bloomfield, Ontario co., for raising 102 1-2 bushels on one acre of land.

And they would recommend the awarding of a premium of \$5 to Amos A. Egleston of Greenwich, Washington co., for the peculiar excellence of the specimen presented by him, weighing 42 lbs. to the bushel, it being also a large crop.

There were no applicants for peas.

H. D. GROVE, HOWELL GARDNER,
HENRY HOLMES, T. W. SANDERS,
JOHN A. MCNEIL.

REPORT ON ROOT CROPS.

The committee to whom was referred the duty of adjudging premiums on root crops, report:

That upon the inspection of the various applications made by the several individuals, which came within the duties of this committee, they found themselves exceedingly embarrassed in the fulfilment of their trust, from the want of the formalities required by the rules of the Society, as well as by the want of evidence to satisfy the committee of the relative merits of the different applications.

The committee have unanimously come to the conclusion to reject all applications that purport to have been harvested, gathered, and estimated by measuring a few rods or other small portion of the acre required by the rules, and also those which have not the evidence of a correct survey.

Several descriptions of the quality of soil, manure used, labor expended, and other expenses incurred in producing the results stated, are so imperfect that it was impossible to arrive at the comparative merits of the crops, as to the economy of expense—all of which defects the committee think can be remedied another year, by having examples of *blank forms* made public through the *agricultural press*, as it is a well settled principle, in the minds of this committee, that no man can nor should be allowed to compete for premiums, who is not liberal and patriotic enough in the great first cause of national prosperity, to put himself in *that way* of procuring the necessary information from *that source*.

The committee think that several of the rejected crops are very meritorious, if the mere dictum of the growers was to be taken as proof, and in several cases would have taken the first premiums, had these oversights been properly avoided.

The committee think it no more than an act of justice to mention the crop of ruta baga turneps of Mr. F. P. Root of Sweden, Monroe county, asserted as producing 1,200 bushels per acre, at 60 lbs. weight per bushel; also the crops of Mr. George Shaffer of Wheatland, Monroe county, which purports to have produced the very large amount of 1,160 bushels of sugar beets and 603 1-2 bushels of carrots per acre, at 60 lbs. per bushel.

The committee award the following premiums:

For potatoes—to Phineas Hardy of Le Ray, Jefferson co., first premium, for 472 bushels per acre, \$15. To H. D. Grove of Hoosick, Rensselaer co., second premium, for 440 bushels per acre, \$8.

For ruta baga—to W. B. Ludlow of Claverack, Columbia co., first premium, for 1,025 1-2 bushels per acre, \$15. To George Shaffer of Wheatland, Monroe co., second premium, for 552 bushels per acre, \$8.

Sugar beet—to S. B. Vail of Mount Laurel Farm, Columbia co., first premium, for 559 bushels per acre, at 60 lbs. per bushel, \$15.

G. V. SACKETT, E. P. PRENTICE,
L. A. MORRELL, L. B. LANGWORTHY,
PATRICK H. COWEN.

The committee appointed to examine that beautiful production of art, called the *Amazon Bonnet*, exhibited to the Society by Messrs. Valentine & Eaton, No. 121 Water street, New-York, beg leave most respectfully to report:

That they entered upon the discharge of the duties devolving upon them, with some little distrust of their ability to do justice to the important subject committed to their charge, from the consideration that this almost indispensable article of female apparel had not hitherto been the subject of much of their attention. To obviate, however, this difficulty, they called to their aid a number of intelligent ladies, by whose taste and superior judgment in these matters, they are bound to acknowledge they were in a great measure controlled.

This specimen of ingenuity, doubtless from some fair hand, commends itself to the American public, from various considerations. It combines great elegance and beauty with strength and durability. It is manufactured from the finest quality of *Manilla* grass. Six thousand five hundred fibres, woven together, will make about one hundred yards of braid, which quantity will make one of the finest class of bonnets. This substantial material may be twisted into an endless variety of patterns, and is susceptible of any color or figure that taste or fancy may dictate. This bonnet can be taken apart, and washed or cleansed with ease, and put together again, losing thereby none of its original beauty or value. Its texture and durability have never been equalled, and for beauty, it surpasses almost any thing of the kind, either domestic or foreign. The raw material from which it is manufactured is imported, but is of small value compared with the labor required in weaving or braiding the same. If it comes into general use, of which we cannot

entertain a doubt, it will open a vast field of productive industry to the many indigent females and children of our large cities and populous towns. If it supplants, as we trust it may, the foreign articles used for this indispensable covering, it may become a source not only of individual but great national wealth. We commend this bonnet to the patronage of the American ladies, and hope soon to see many, very many of their heads adorned by this evidence of good taste and patriotic feeling. Benevolence and charity to a large class of their own sex, who are in destitute circumstances, should prompt them to encourage the production of an article that will afford employment, and consequently comfort and happiness, to thousands of indigent but worthy females. It is a false and anti-American pride which is satisfied with nothing but that which is "far fetched and dear bought."

J. J. VIELE, T. GOODSELL,
HENRY S. RANDALL.

The report of the committee on discretionary premiums has not been handed to the recording secretary.

ANNUAL MEETING OF THE SOCIETY.

The annual meeting of the New-York State Agricultural Society was held at the Lecture Room of the Young Men's Association, in the Exchange, Albany, on the 19th of January, 1842. At 11 o'clock, A. M., the president of the Society, JOEL B. NOTT, Esq., took the chair, and T. R. COURTNEY was appointed secretary pro tem.

On motion of Judge SACKETT of Seneca, a committee of three, consisting of Messrs. SACKETT, BEMENT, and GROVE, was appointed to collect the annual dues of members, and to receive the subscriptions of new members. This committee afterwards reported that the sum of \$117 had been received during the meeting.

The report of the treasurer, E. P. PRENTICE, Esq., was received, read, and accepted. The receipts of the Society the last year, were as follows:

Balance in treasury at last meeting,.....	\$46 87
From eight life members, \$50 each,.....	400 00
Seven subscriptions, \$25 each,.....	175 00
Two " " \$20 each,.....	40 00
Eleven " " \$10 each,.....	110 00
Twenty-three " " \$5 each,.....	115 00
From members, and other sources,.....	442 82
From Comptroller of the State,.....	700 00

\$2,029 69

Paid premiums, expenses, &c.,..... 1,065 46

\$964 23

From which is to be deducted about \$200 for premiums awarded, but not paid.

The treasurer also reported that a quarter of one of Mr. RUST's fat oxen, which was presented to the Society by Mr. RUST, had been sold for \$64 67, which, added to the above sum, would leave a balance in the treasury of about \$800, after the payment of all demands against the Society.

On motion of Dr. J. P. BEEKMAN of Columbia,

Resolved, That the thanks of the Society be presented to the Executive Committee, for their successful exertions in raising funds for the treasury.

On motion of B. P. JOHNSON, Esq., of Oneida,

Resolved, That the thanks of the Society be presented to P. N. RUST, Esq., of Syracuse, for the splendid quarter of beef presented by him to the Society, the avails of which have been applied in aid of its funds.

The report of the corresponding secretary, H. S. RANDALL, Esq., was then read and accepted, and the thanks of the Society voted to him for the able manner in which he had performed the duties devolving upon him.

On motion of H. S. RANDALL, Esq.,

Resolved, That a committee, to consist of all the presidents of the county societies present, and a delegate from each county society not represented by its president, be appointed to nominate officers of the Society for the ensuing year.

On motion of J. J. VIELE, Esq., of Rensselaer, the same committee were instructed to fix a time and place for holding the next Fair of the Society.

On motion of J. S. GOULD of Columbia,

Resolved, That the Executive Committee be requested to procure a dynamometer of superior workmanship, for the use of the State Society, and that it be recommended to the several county societies to procure one for the use of their respective societies.

On motion of Gen. CLARK of Washington,

Resolved, That the Executive Committee be instructed to offer gold medals or pieces of plate, or their equivalent in money, to the authors of the best essays upon such subjects as the committee shall deem best calculated to promote the cause of agriculture—the successful essays to be the property of the Society. The list of premiums for essays to be issued eight months previous to the next annual meeting.

Mr. MCINTYRE, from the committee to nominate officers for the ensuing year, reported the following, who were unanimously elected:

JAMES S. WADSWORTH, Genesee, President.

Vice Presidents.

- 1st district, JEREMIAH JOHNSON, Brooklyn.
- 2d " ROBERT DENISTON, Salisbury Mills.
- 3d " ANTHONY VAN BERGEN, Coxsackie.
- 4th " JOHN SAVAGE, Salem.
- 5th " ORVILLE HUNGERFORD, Watertown.
- 6th " GEORGE I. PUMPELLY, Owego.
- 7th " JOHN M. SHERWOOD, Auburn.
- 8th " L. B. LANGWORTHY, Rochester.

HENRY S. RANDALL, Cortland Village, Cor. Sec'y.

EZRA P. PRENTICE, Albany, Treasurer.

LUTHER TUCKER, Albany, Recording Secretary.

Additional Members of the Executive Committee.

ALEXANDER WALSH, Lansingburgh.

GEORGE VAIL, Troy.

HENRY D. GROVE, Buskirk's Bridge.

J. McDONALD MCINTYRE, Albany.

JAMES L'AMOREUX, Albany.

On the report of the same committee, it was

Resolved, That we recommend to the Executive Committee to hold the next Fair of the Society on the 28th and 29th days of September next, in Albany or its vicinity, and that we farther recommend that the Fair of 1843 be held at Rochester.

On motion of L. A. MORRELL, Esq., of Tompkins,

Resolved, That the thanks of the Society be presented to the Young Men's Association of Albany, for the use of their Lecture Room, and for their polite invitation to the members to visit their Reading Room and Library.

On motion, the Society then adjourned, to meet at the Capitol at 7 o'clock, P. M.

EVENING MEETING.

The Society convened at the Capitol, pursuant to adjournment, at 7 o'clock, P. M., when the Annual Address was delivered by the president, J. B. NOTT, Esq.

On motion of J. J. VIELE, Esq., it was

Resolved, That the thanks of the Society be presented to JOEL B. NOTT, Esq., for his able and eloquent Address, delivered on this occasion; and that a committee of three be appointed to solicit a copy of the same for publication. [Committee—Messrs. VIELE, GROVE, and WALSH.]

On motion of Dr. GOODSELL of Utica,

Resolved, That this Society recommend to the county agricultural societies to use their exertions to establish town societies.

On motion of J. B. NOTT, Esq.,

Resolved, That a committee of five be appointed to report at the next meeting on the propriety of establishing an Agricultural Board for this State. [Committee—Messrs. NOTT, VAN BERGEN, BEEKMAN, LUDLOW, and VIELE.]

Amendments to the Constitution.

On motion of J. B. NOTT, Esq.

Resolved, That no article of the Constitution can hereafter be altered or amended, without a notice thereof being given one year before such alteration.

Mr. FULLER gave notice that at the next annual meeting of the Society, a motion will be made to amend the Constitution, so that presidents of county agricultural societies shall be ex-officio members of the Executive Committee of the said Society.

The Society then adjourned, sine die.

Notices of New Publications.

FOURTH REPORT OF THE MASS. AG. SURVEY.

WE have received from Mr. COLMAN his Fourth Report, in the form of a beautiful, well bound volume, of more than 500 pages. We have been so much interested in these Reports, and they have contributed so much to the stock of agricultural knowledge, that we regret to learn from the preface to this volume, that this Report is to be the last, "the Legislature of that State having seen fit to repeal the act authorizing the survey, before its completion." In our opinion, had the survey done nothing more than produced the volume before us, it would have repaid the State a thousand fold the trifling expense incurred. It is in fact the most complete history of the present state of New England agriculture, (and, with some slight modifications, that of all the northern States,) that has yet been given to the public. The marks of great labor and patient research and toil, are visible on every page, and form a source of the most valuable information on almost every practical point of our agriculture. The reader may differ from some of the expressed opinions of the writer, but he will not fail of feeling that these opinions have not been hastily formed or lightly expressed. Although in its title, this Report embraces but the counties of Franklin and Middlesex, (the first Report embraced the county of Essex, the second that of Berkshire, and the third Report was on the subjects of Wheat and Silk,) the Commissioner has extended his remarks so as to include the most important subjects of agriculture, and their present condition throughout the State. It includes a mass of practical facts and illustrations, to be found in no other form. We shall have frequent occasion to refer to it, hereafter.

AMERICAN ANTIQUITIES.

WE are indebted to the publishers, Messrs. Dayton & Saxton of New-York, for a copy of H. W. BRADFORD's new work, entitled "American Antiquities, and Researches into the Origin and History of the Red Race." To those who feel an interest in the great questions connected with the settlement and peopling of the American continent; the race of orientals from which those first settlers were derived; the history of those ancient monuments so abundant in both North and South America; the manner in which this continent was first peopled, with the collateral questions of philology, customs, &c. that naturally spring from the subject, this work cannot fail to be abundantly fascinating. The fact that it does not properly come within the objects contemplated in our journal, only prevents a more extended notice. The

work is got up in the best style of the New-York press, and we doubt not will at once secure the favorable notice of the public.

"THE VETERINARIAN."

WE have received the October, November, and December numbers of this capital journal, conducted by Mr. Youatt, the well known author of the great works on Cattle, Horses, and Sheep, published in London. These numbers are well filled with papers on the various diseases of animals, particularly the Epizootic, which is now producing such disastrous effects on cattle in England. Of one of these we shall hereafter give an abstract, in the department of the Cultivator devoted to such subjects.

QUARTERLY JOURNAL OF AGRICULTURE, No. 55.

THE leading paper of this number of this first agricultural journal of Great Britain, is an able article by Dr. Wilson, on the health of the laboring population of Kelso in Scotland. Then follows No. XI. of Dr. Duncan's papers on "Insects most injurious to vegetation and animals, and the means best calculated to counteract their ravages." This series is a most valuable contribution to the history of those insects that in various forms detract so much from the profits of the husbandman. A large part of the No. is occupied with a detailed account of the great meeting of the Highland Agricultural Society of Scotland, at Berwick, in 1841. There is also a long and excellent paper by Dr. Madden, on the Effects of Draining, beside many others on minor topics.

LONDON FARMERS' MAGAZINE FOR DEC., 1841.

THE engravings in this capital journal, for the present month, are three South Down Rams from the celebrated flock of Mr. Webb of Brabraham. The South Downs brought out by Mr. Allen for Bishop Meade and Mr. Stevenson of Virginia, and Mr. Rotch of this State, are from this stock. It is but a short time since British farmers discovered there was such a thing as American agriculture or American agricultural journals, yet this number of the Magazine contains several papers from the Cultivator and other agricultural papers of this country. The Monthly Review of the Corn Trade in this work, is a good view of the grain markets of different parts of the world; but in the section devoted to the United States, there is sometimes a spice of bitterness which savors of illiberality, and might well be spared.

SILLIMAN'S JOURNAL.

THE present number is rich in materials interesting to the friends of science, as well as to the general reader. The notes upon the "Geology of the Western States," by Prof. Hall, are interesting, as showing the relative condition in the west, of the great transition formation of Western New-York. Prof. Hall found that some of the most important formations in New-York, the Onondaga saliferous group for instance, which is in central New-York 1000 feet thick, entirely disappears at the Mississippi; while the Niagara limestone, which in central New-York has but a few feet of thickness, has acquired in Wisconsin and Iowa, a depth of five or six hundred feet. The researches of Prof. Hall, have proved that the Niagara limestone is the same rock that contains the rich mineral deposits of the West, particularly of Wisconsin and Missouri; and that it is in consequence, one of the most important rock strata of the United States.

We are pleased to perceive that a suggestion made by us to the editors of this journal, respecting the yellow dust that accompanies summer showers, which has been attributed to various sources, but which we have long considered the pollen of forest trees, has led to an investigation which has satisfactorily determined its character, and shown that our supposition was correct. In consequence of our suggestion, the editors sent a quantity of this yellow powder, that fell on the deck of a vessel in Pictou Harbor, N. S. and some received from Prof. Eaton of Troy, to Prof. Bailey at West Point, who examined it with his powerful microscope, and discovered at once that the powder from Pictou was the pollen of some species of pine, while that from Troy, was the pollen of various forest trees, the pine excluded. The figures given by Prof. B., in the Journal, exhibit admirably the peculiar form and variations of the pollen.

The paper of Mr. Redfield on the great storm of December 10th, with the accompanying diagrams, will show forcibly the nature and course of our severe storms. The student of botany will examine with pleasure the botanical excursion to the Mountains of North Carolina; and in the miscellaneous department there is much to instruct. Every lover of science should possess this Journal.

"NORTHERN LIGHT."

WE are gratified to learn from the last number of this ably conducted and popular periodical, that arrangements have been made for the continuance of the work on the same plan, and under the same editorial supervision as the present or first volume. The execution of the "Northern Light," in both its literary and mechanical departments, is excellent. Established on a plan that admits of free discussion on all the great questions of political economy; embracing valuable papers on the sciences and on agriculture; furnishing statistical records of the



GROUP OF HORSES.—(Fig. 10.)

ABOVE, we give a group of horses, copied from one of the London magazines, showing at a single view the distinctive marks of the principal varieties of that noble animal now existing in Great Britain. It shows the pony, both Welch (a) and Shetland, (b) the draft horse, (c) the hunter, (d) and the racer, (e.)

The English race horse is unequalled for speed, power, and spirit; and from this stock the American race horse is derived. The excellence of this blood is clearly traced to the Darley and Godolphin Arabians; the first from the deserts of Palmyra, the last a Barb, but of extraordinary performance. The hunter, one of the most esteemed horses of England, as combining the qualities of speed and endurance, is a remove from the racer in the first degree; that is, they are what are called three-fourths bred. The best hunters are the product of a Cleveland mare, a first rate breed for all work, and a thorough bred horse. The best road or saddle horses are allied to the hunter, but more compactly built. The coach horse and light carriage horse are the product of the Cleveland mare and hunter of high blood. The lightest yet best of the English draft horses, is the Cleveland; and the Suffolk, now nearly extinct, is also an excellent stock. The heavy Lincolnshire black exceeds all in size and power. The teams in the London brewers' and distillers' carts are of this breed. Most of them

exceed seventeen hands in height. These horses have within a few years been much crossed with the Flanders breed, to their great improvement. The sow, elephantine black, of 12.0 and a half miles per hour, has been changed into a lighter but still powerful horse, that steps four miles per hour with perfect ease, and has at the same time more endurance.

The difference between these large horses and the Welsh or Shetland ponies is so great, that it seems scarcely possible they should belong to the same species. The Welsh pony is a beautiful animal, and its strength, in proportion to its size, astonishing. Mr. Youatt states that one of these miniature horses, only nine hands high, carried a man of twelve some forty miles in one day. Some of the Shetland ponies are very fine, but their size is still less than the Welsh breed. The writer of the article in the Magazine says that, in 1831, he measured a Shetland pony, the height of which at the shoulders was only thirty-four inches, and its length from between the ears to the insertion of the tail, following the curve of the neck and back, four feet two inches. It was a spirited and beautiful animal. The varieties of the English horse, arising from the mixture of these breeds, and of some brought from the continent, particularly the Norman horse, is innumerable, and varied as the fancy or the judgment of the breeder can make them.

greatest value; and giving a place to articles of lighter literature that have distinguished merit to recommend them, the "Northern Light" occupies an important position, peculiar to itself, and interfering with none of the scientific, literary or agricultural journals of the day. Its distinctive features, and the distinguished ability with which it is conducted, have rendered the "Northern Light" a general favorite wherever it has found its way. We are pleased at the success which has attended this journal; it would have been a disgrace to our country, had such a periodical failed for want of a liberal support.

AGRICULTURAL JOURNALS, &c.

THE UNITED STATES FARMER and Journal of American Institutes, is the title of a new monthly just commenced in New-York, by S. FLEET, Esq. the original proprietor and editor of the old "New-York Farmer," which was discontinued some years since. Mr. Fleet has done much for the cause of agriculture in times past,

and we wish him success in his renewed efforts in its behalf. The United States Farmer is issued monthly, 40 pages 8vo. at \$2 a year.

CENTRAL NEW-YORK FARMER.—We have before us the first number of a paper bearing this title, published at Rome, by H. N. BILL, and edited by Messrs. JOHNSON & COMSTOCK. Though small it is filled with useful matter, and will doubtless prove a valuable acquisition to the farmer's cause.—16 pages octavo, at 50 cents a year.

THE EASTERN FARMER AND JOURNAL OF NEWS, is the title of a semi-monthly quarto sheet, at \$1 a year, edited by F. O. J. SMITH, just commenced at Portland, Maine.

THE MAINE FARMER, published at Winthrop, has been greatly enlarged, and changed from a quarto to a folio, with the addition of "Mechanic's Advocate" to its title. Dr. E. HOLMES, editor—weekly at \$2 a year. A monthly sheet is to be issued, embracing the agricultural articles published in the weekly, at 50 cents a year.

THE FARMER'S MONTHLY VISITOR.—A new volume,

(the 4th,) of this valuable work commences with the new year. It is sufficient commendation to say that it bears the impress of the strong good sense and vigorous action which characterises all the efforts of Gov. HILL. Concord, N. H.—75 cents per ann.—3 copies for \$2.

THE MAGAZINE OF HORTICULTURE, is published at Boston, by HOVEY & Co. 40 pages octavo, monthly at \$3 a year. It is highly creditable to our country that a work of this high character has received sufficient support to be continued for seven years. It should be in the hands of every amateur horticulturist, and now is a proper time to order it, as the first number of the 8th volume has just been issued.

THE AGRICULTURIST, Nashville, Tenn. and THE SOUTHERN AGRICULTURIST, Charleston, S. C., both well known and valuable works, commence new volumes with the present year.

THE BRITISH AMERICAN CULTIVATOR, is the title of a new journal, at Toronto, U. C. edited by EASTWOOD and EDMUNSON, at \$1 a year.

THE NEW-YORK STATE MECHANIC, is the title of a very handsomely executed weekly, at \$1.50 a year, recently established in this city, by J. MUNSEL & Co. under the direction of the New-York State Mechanic Association. It is ably conducted, and if properly supported by the subscriptions and contributions of the mechanics of this state, cannot fail to be a valuable acquisition to our list of useful periodicals.

THE AMERICAN MECHANIC, New-York, edited by R. PORTER, weekly at \$1.50 a year—and THE ELEVATOR, recently commenced at Cincinnati, by LOVEJOY & ROBERTSON, weekly at \$1.50 a year, are both valuable works, and worthy the support of the mechanic interest.

CULTURE OF THE GRASSES.

THE report on grasses, by the committee of Cuyahoga (Ohio) Ag. Society, is principally under four heads; and as the subject is one of importance, and the remarks appear to us very just, we extract the principal part of these divisions.

1st. What quantity of seed should be sown?

Your committee think that eight quarts on new land and ten quarts on old land per acre, is a proper quantity for red clover, and nearly the same amount of timothy, if sown alone. These seeds are frequently mixed before sowing for meadow land, with advantage. Say on dry land two-thirds clover and one-third timothy; and on moist land one-third clover, and two-thirds timothy. We recommend liberal seeding, as it not only checks the growth of weeds, but the hay grows finer and stands better, particularly clover.

2d. Method of seeding?

Where grain is to be sown we recommend wetting it, then mix grass seed; plaster or ashes may also be added before sowing. The seed is thus sown more evenly, and much labor saved; plowed land should be harrowed before seeding in this manner.

3d. Best season for seeding?

Sowing on snow on wheat ground, and with grain sowed in the spring, is the most common method. This mode of late, and in dry seasons, has frequently failed. The seed vegetates but dies for want of moisture. Some farmers have tried fall seeding with winter grain, and your committee are informed with uniform success, and without injury to the wheat crop.

4th. What grasses are best adapted to our soil and climate?

Timothy and red clover require nothing said in their favor. The former for moist land, and the latter for dry land are unrivaled. White clover comes in without seeding and is valuable. Lucerne, from the experiments made, does not seem well adapted to our climate. The experiments with rye grass are flattering. Orchard grass is recommended as growing better in the shade of trees, than any other, and also doing less damage to fruit trees than most other grasses. The seed of this grass is much wanted. The committee announce their intention to test by experiment, the value and adaptation of the other grasses, highly recommended in other countries, and other sections of our own.

COUNTY AGRICULTURAL SOCIETIES.

ALBANY.—At the annual meeting of the Albany County Agricultural Society, held at the City Hall, Albany, Jan. 12, 1842, the following officers were elected for the present year:—Tunis Van Vechten, president; J. McD. McIntyre, Oscar Tyler, Caleb N. Bement, Amos Cray, P. S. Vanderburgh, John Haswell, Abraham Verplank, William Murphy, Robert S. Lay, and David Conkling, vice presidents; Luther Tucker, cor. sec'y; A. E. Brown, treasurer; Thomas Hillhouse, recording secretary; Samuel Cheever, E. P. Prentice, L. G. Ten Eyck, John S. Walsh, and James Wilson, additional members of the Board of Managers. A meeting of the Board of Managers, consisting of all the above officers, will be held at the office of the Cultivator, in Albany, on Wednesday, February 9, 1842, at 11 o'clock, P. M.

NIAGARA.—Officers for 1842:—William A. Townsend, president; Davis Hurd and John Gould, jr., vice presidents; William Parsons, secretary; Wm. O. Brown, treasurer.

TOMPKINS.—Officers for 1842:—Nicol Halsey, Ulysses, president; Nathan Benson, William Carman, Luther Gere, Joshua North, H. Nurse, Henry R. Morrell, Geo. Jones, Warren Phelps, and Robert C. Ellis, vice presidents; Lewis A. Morrell, Lake Ridge, corresponding secretary; Nathan T. Williams, treasurer; George P. Frost, Ithaca, recording secretary.

SECOND BLOSSOMING OF FRUIT TREES—GREAT CROP OF CORN—STONE WALLS.

THE last season in western New-York, was remarkable for the frequent appearance of that rare phenomenon at the north, the second blossoming of fruit trees. This may be attributed, perhaps, to the severe and protracted drouth, which so reduced the circulation of sap, as to produce a species of hybernation or rest of plants, not unlike that effected by the cold of winter. The case of the orchard near Rochester, however, where the trees, stripped of their foliage by a violent hail storm, late in the season, put forth a full growth of new leaves and blossoms, may be in part attributed to such defoliation. The following extracts from the letter of a gentleman atodus Wayne co., will describe some instances of second blossoming at that place, &c.

"The trees which blossomed twice on my own premises, were pear and apple trees, and among those belonging to others, were several plum trees. My own had been transplanted in the spring, and I believe the others which I saw in full blossom, were also set out last spring. I have occasionally seen blossoms, a few in number, on trees in other seasons, but the trees to which I now refer, were full and white with blossoms, in their highest perfection. I saw several in the deep, gravelly soil of the Ridge, and others in a clay soil in another part of the town. The severe drouth of the summer had nearly deprived them of every vestige of foliage, and but few indications of life were remaining. When the early rains commenced, they appeared to renew their vitality, exhibiting all the appearances of vernal resuscitation. Succeeding the blossoms, was a fine bright green foliage, distinguishable at once from that of the surrounding trees, and which retained its fine hue longer than the leaves which had matured early in the season."

"One of the best yields of corn recorded in this State, was grown at the old Shaker settlement, on the west side ofodus bay, in 1840. The ground cultivated by Mr. Clowe, the grower of the crop, was part of the old Shaker garden, in the highest state of cultivation, and the soil adapted to obtaining a corn crop in the highest perfection. The corn was White corn, and was planted in drills. The crop was 436 bushels from 4 measured acres. He planted the same ground in 1841, but the severe drouth reduced his crop to 60 bushels per acre."

"The stone fence to which reference has been made, is in what is called the Granger settlement, in the south part of this town, and is on the farm of Mr. Flavel Kingsley. He has seventy or eighty rods running across his farm, and next to the highway. It is made by laying the wall in lime mortar, much in the manner of cobble stone building, with a coping of boards to protect the top. Mr. Kingsley's wall has a considerable part of it stood six or seven years, without apparently receiving the least injury from warping or cracking, except at places left for bars, where the end of the wall, being built up perpendicularly, has cracked a little from one to two feet from the square end of the wall. This it is presumed might be remedied by digging down, and laying the bottom below the frost, just at the end. All other parts of the wall have sufficient firmness to resist any injury from frost or otherwise, by laying the bottom of the wall on the top of the ground. The durability and firmness of the wall, depend very much on the right tempering of the mortar. Mr. K. has several pieces of wall, in some of which too much sand was mixed with the mortar, and these have washed by the rain; and although not at present essentially injured, will doubtless dilapidate or need repairing much sooner than the wall first built. The wall is laid two feet in width at the bottom, and regularly approximating to about eight inches on the top. A piece of timber or joist for the purpose of nailing the cap or coping of the wall or fence to, in this form, is inserted three or four inches into the top of the wall, and a board, projecting slightly over the wall, to defend it from the rain and weather, nailed on each side of these blocks of joist.

Mr. Kingsley estimates the cost of the fence at \$3 per rod. He has paid per rod \$1 25 for laying the wall; the materials and other expense, \$1 75. He has some beautiful fence around his yard; bottom two feet two inches, top eleven inches, height five and a half feet; (the farm fence is four and a half feet high.) On the top is laid a stick of timber, flattened by hewing two sides, and this forms the back and basis for sheds. These are made by setting posts in the ground, and laying a pole on the top in front, which, covered with a board roof, makes a comfortable and cheap shelter for cattle. Such fences as Mr. Kingsley's are not only a great ornament to a farm, but can scarce get out of repair—and can never make unruly cattle."

PRODUCTIVE POTATOE.

At the late meeting of the New-York State Agricultural Society, Dr. HERMAN WENDELL of this city, exhibited six pecks (numbering 494) of a new variety of potatoe, said to have originated near New Haven, called the Kelseyian or Perfectionists, the produce of two tubers. The tubers are studded with eyes: these eyes were cut out singly, and three planted to a hill. The edible qualities of the potatoe are very superior, fully equal to the Mercer.

Dr. Wendell will be happy to present sufficient seed for trial to any gentleman who wishes to do so, and who will share the products with his brother agriculturists,

as he considers them a great acquisition to the country, they being at least as productive as the Rohan, and a superior edible root.

SMITHFIELD SHOW OF FAT CATTLE.

THE annual show of the Smithfield Club, was held in London, during the second week of December. This show is exclusively for animals fitted for the butcher, in the four first classes, consisting of oxen and steers of different ages, the Herefords received the four first prizes in each class, and the second prizes in two of the classes. The second prizes in the other two classes, were awarded to the Durhams. We suppose this may be in part accounted for, by the fact, that comparatively few Improved Durhams are sent to the butchers, the demand for bulls of this breed forbidding their use as steers or oxen. In the classes of cows and heifers, the four prizes were awarded to Improved Durhams. Four of the five prizes for South Downs were awarded to the Messrs. Webb of Babraham.

SHORT HORNS.

THE following remarks from the pen of Mr. Bates, of Kirkleavington, the celebrated breeder of Short Horns, we find in the London Journal of November 15:

"With regard to stock; the English breeders know nothing about the value of Short Horns, and if foreigners persevere they will take out the best of them. I told the breeders in Tyneside, above thirty-five years ago, that in less than thirty years not one of them would have an animal fit to look at, and before twenty years this was actually the case. And now those animals, (being despised, as being mine,) prove themselves, and they might then have had access to the same bull that did me so much good, Ketton First, and also Second Hubback; no one could or would see his value, while living. But unless they now get his blood, they can neither have coat or handling, and what are cattle without these requisites."

In commenting on Mr. Bates' letter, the editor of the Journal adds: "We could have wished, with Mr. Bates, that that invaluable breed of cattle, the Short Horns, had received greater attention from graziers and others than it appears to have had, from their well known merits, while we certainly conceive that our transatlantic brethren have procured from us such blood as will in a few years hence, bring them nearly on a level with ourselves." The editor then quotes from a paper by a correspondent in the Cultivator, a passage relating to the propriety, now we have the means, of rendering ourselves independent of England so far as regards stock, by the improvement of those now in the United States, and then adds:—"Jonathan has here read us a very useful lesson, as it proves to demonstration that however much he may admire English gold, he does not 'calculate' that foreigners have any just claim to his."

LONDON FARMER'S MAGAZINE ON THE GRAIN TRADE WITH THE UNITED STATES.

WE make the following extract from the Monthly Review of the corn trade in the Farmer's Magazine, for December; we give it because it contains some truth, and as a specimen of English feeling on this subject:

"From the United States of North America, the information received respecting the corn trade is to the middle of last month, but it is not important. Flour continued to be forwarded to Europe in considerable quantities; and could our transatlantic brethren only prevail on Englishmen, to take their food in exchange for labor, the Americans promised to themselves great and important advantages, from an alteration in the legitimate principles of trade of this description. They are ready to undertake the pleasing and healthful labors of cultivating the fields, while John Bull is to labor in the factories or the mines like a Peruvian slave, or to hammer hot iron before a furnace, in exchange for his food, entirely for the benefit of his liberal employers. A gentleman from the banks of the Ohio, is now lecturing in the manufacturing districts; he knows what is good for the inhabitants of the British empire, far better than they know themselves, and assures them so long as their health permits them to labor like horses, like that useful animal they will be supplied with provisions in proportion to the amount of work they may be able to perform in this—the great workshop of the world. American flour, and American salted beef, will certainly be a treat to John Bull; for it will be a change from the monotony of being continually obliged to eat fresh beef, as he now does, under the present system of protection, which his wages and his food receive from the admirable principles of the corn laws. . . . To give and take is the real foundation of all descriptions of commerce; and this principle is now carried out, and always must be, to its fullest extent. America continues, and will continue, to take from us that quantity of our manufactured goods, which her inhabitants can conveniently consume, and we will continue to take as much American tobacco, cotton, wool, and grain as our actual wants require; but most certainly we can never consent to put our agricultural laborers out of employment for the purpose of employing those of foreign nations, even though apparently they should produce grain cheaper than can be done in the British Kingdom."

There is no soil, be it ever so bad, but may by proper care and judicious manuring be brought to a beneficial state of cultivation.

Correspondence, Inquiries, &c.

INQUIRY—RINGING THE NOSES OF CATTLE.

"MESSRS. EDITORS—I should be pleased to receive some instruction, through the Cultivator, as to the proper age for placing a ring in the nose of a calf, and the best manner of performing the operation.

Cecilton, Maryland.

T. M. FOREMAN."

The ring may be placed in the nose of a calf at almost any period after it is weaned, and the muscles of the nose become sufficiently firm to sustain the iron; but perhaps any time between the ages of one and two would be better than earlier. If delayed later, the greater strength of the animal renders the operation more difficult, but it may be performed at any age. The use of the ring is to secure and render manageable the animal, and a bull should always have a ring in his nose, particularly if inclined to be vicious.

There are several modes of making these rings, which should always be of the best iron, that there may be no danger of breaking, and which should be as light as is consistent with safety. The easiest method is to take a large wire or round iron of the proper size, form it into a ring of about two inches in diameter, the ends so squared and adjusted as to fit close and even, and then separated, to pass through the septum or division of the animal's nose; after which, by placing a sledge or other heavy iron on one side, with a smart blow of a hammer on the other, the ring is closed and finished. Another ring is made with a joint, formed by halving and riveting, and after the ring is passed through the nose, it is again riveted and secured. Another ring is made by slightly turning out the ends of the ring, and adjusting the two parts, through which a hole is made by drilling or punching. After it has been passed through the animal's nose, a rivet or screw is inserted through this hole in the projecting part, and the operation is done.

VERMIN ON PLANTS.

H. S. PECK of Newtown, Ct., inquires "whether there is any thing that will effectually eradicate vermin on plants?" We answer we know of nothing which will effect this. Plants are infested by so many and such different kinds of insects, that the extirpation of all would be a hopeless task. Besides, substances powerful enough to affect or destroy some of them, would also be destructive to the plant on which they are found. Perhaps there is no class of insects or "vermin" more numerous or more destructive than the Aphis or plant louse. There is scarcely a tree or plant on which they do not appear in the course of the season, and sometimes in most formidable numbers. All the young and tender shoots of fruit trees, the cultivated plants of the garden, and the crops growing in the field, are liable to their attacks. Air, good cultivation, and healthy, vigorous plants, are the best safeguards against vermin on plants. When they appear, if a little extra attention is paid to destroying them at first, much trouble for the future is saved, for there is no creature that increases its numbers more rapidly than the plant louse. They may be suffocated by the vapor of sulphur or tobacco; may be destroyed by throwing upon them ley, soap suds, or a decoction of tobacco, with a syringe or a watering pot. Some experiments made last year with suds made from whale or tanner's oil soap, seemed to prove that this would be one of the most effectual preventives known in preventing the attacks of insects on plants. It is said to be an effectual remedy for that destructive insect, the rose bug.

NEW MANURES.

OUR correspondent, "RUSTICUS, JR.," has enclosed us a copy of the paper that for some months has been going the rounds of the papers, as translated from the French journal, the *Phalange*, on an "Important Discovery in Agriculture," or a method of producing vegetation, or growing crops without tillage or reference to the earths proper; and also a copy of Mr. Bommer's prospectus for his "New Method of Making Vegetable Manures by Fermentation," for which he has taken out a patent, and requests our opinion on their merits.

As to the first, the facts stated in it, that are of value, and applicable to the purposes of agriculture, are not new, but have of late been made more familiar by the more extensive application of chemistry to agriculture. It is now well known that the earths, silica, alumina, lime, &c. contribute very little to the growth of plants, and that these derive their subsistence from other sources. The earths appear, however, necessary as a depot of nutritive matter, and a reservoir of moisture, which, in some form, is essential to plants; and as these must have something for their roots to penetrate to ensure support, tillage, by rendering the earth permeable, secures this object, and also enables the earth more readily and abundantly to absorb from the air those gaseous matters which all admit are useful to vegetation. That a plant of wheat should grow and come to maturity on a plate of glass or on a rock, so large that the roots could find no earth to penetrate, and only covered with one inch of straw, is incredible, and we think contrary to the experience of thousands of farmers. The wheat placed on glass, and covered, would doubtless germinate, and if the roots spread over the edge of the pane, and took hold of or penetrated the earth, it would come to maturity, but not otherwise. We think farmers who discontinue plowing, or sow seeds on rocks or glass, where

only an inch or even less of earth is to be had, will be likely to be placed at harvest in the predicament of the man spoken of in the scripture, who sowed seed on stony ground, where there was not much depth of earth.

As to Mr. Bommer's patent method, we cannot speak decidedly, knowing nothing more of it than is stated in his Prospectus. If he is able to convert refuse vegetable matters, such as he has stated, into good manure in fifteen days, or, as we understand him, effectually decompose them in that time, he has made an important discovery, provided at the same time the fermentation necessary to complete the process does not cause the escape of some of the most valuable of the substances, or salts of the matters used, and its consequent loss. It is not many years since an invention for the preparation of manures, by which vegetable matters, which take months or even years to decompose, could be speedily converted into mold, was announced at Paris, and created quite a sensation in the agricultural world. Extensive experiments were entered into, both in France and England, to test its utility, the results of which were unfavorable to its use, both as respected economy and value. The violent fermentation necessary to the speedy decomposition of masses of matter such as Mr. B. has specified, is very apt to deteriorate the manure so formed; but if Mr. B. is able to avoid this result, and convert straw, corn stalks, or common earth, into rich manure in the time specified, and at a reasonable expense, he will be considered a public benefactor. Experience in this case, as well as most others, will give the true response.

POUDRETTE—INQUIRY.

OUR correspondent, "A. W. S.," at Hempstead, L. I., who inquires respecting the use of poudrette as a manure for potatoes, the quantity used, and the cost of the manure at New-York, is informed that although we have never used poudrette on that crop, yet there can be no doubt, from the testimony of those who have, that it will be found most efficient and valuable for that as well as other roots. The quantity recommended and used is about a gill or rather less per each hill, sometimes put into the hill alone at the time of planting, and sometimes mixed with an equal quantity of good mold, and two gills put upon the seed at planting. From half a gill to a gill is used for corn. One bushel of it is considered equal in effect to thirty bushels of street or horse manure, when applied thus directly to the hill; but when sown broadcast for wheat, more is required. From fifteen to thirty bushels is generally sown; it is said "fifteen will produce very satisfactory results—more than thirty-five is useless." The present price of poudrette we do not know. Last season, the price varied from thirty to forty cents per bushel, according to the supply, mode of packing, &c.

Our correspondent's crop of four hundred bushels of "fine Mercers" from an acre, would be considered a good crop any where, and there are few varieties of potatoes better deserving of cultivation for the table than this.

If the soil on which our correspondent proposes to plant trees is "so hard as to cut with a pick-axe," we know of no tree which will flourish in such a situation. When it is desirable to plant trees on such soils, the holes should be dug very broad, and at the time of planting filled in with good surface earth or mold. If the soil contains so much clay as to be retentive of water, drains filled in with stone must be made to allow the surplus water to pass off. When so prepared, any tree our correspondent chooses will succeed, always remembering that such as are most common to such localities or soils, or have been acclimated, will succeed best. With us, the elm would push itself forward the most rapidly in such soils; and some of the varieties of the oak will thrive in a very dense soil, if it is suitable in other respects.

We shall be pleased to receive the portrait of his cow, "Eliza," of which our correspondent speaks.

STYPTIC—INQUIRY.

THE following is from the pen of a respected correspondent at Flint Rock, N. C. If any of our readers are acquainted with such a styptic as he has alluded to and will forward the remedy to us, we will give it a place with pleasure. White vitriol we have found the most effectual in checking the flow of blood from a wound, of any thing we have seen used. The great object is to coagulate the blood as quickly and deeply as possible, and a preparation of vitriol is very efficient in this respect. The common meadow puff-ball, dried, then opened and bound on a wound, will frequently check the flow of blood. When, however, there is reason to apprehend that an artery is cut or wounded, it must be either taken up or compressed immediately, or fatal consequences may ensue. Compression may be effected by any one, until a physician can be procured.

"Having wounded myself some time since, so as to bleed till I fainted, I take occasion to inquire for an effectual remedy to stop bleeding, particularly in case an artery is wounded, which I have reason to believe was the case with myself. It is very necessary that an effectual remedy, which is easily to be procured, should be generally known, especially among farmers, as it is often the case they have a great distance to go for the doctor, (which is the case here,) and when he did arrive, it might be too late for him to be of any service."

FEEDING SHEEP AT STACKS.

A "SUBSCRIBER" at Poughkeepsie, who says "he knows from experience that sheep waste less hay when they run to a stack than when fed in any other way," and who wishes to make some experiments in the way of feeding recommended by Mr. Titus, at page 164 of the last vol. of the Cultivator, requests us to inquire whether the rails in that plan, upon which the stack rests, lie on the ground, or on the bottom rails of the fence enclosing the stack; and if laid on the ground, whether there is not danger, as the sheep eat out the bottom, of the stack falling upon them and catching them under it, or what will be the effect of the grass seed and dust on the wool.

If Mr. Titus, or any other gentleman who has tried this or other methods of stack feeding, will reply to our correspondent, they will confer on him, and us, a favor. We may add, however, that Mr. Titus evidently intended to have the rails on which the stack is to be built, lie flat on the ground, the only object in having such rails being to keep the hay from the ground. We have for several years been in the habit of stacking our straw in such a manner that, as it is eat out at the bottom, it gradually settles—a mode of feeding far more economical and useful than any other we have seen tried; yet we have never experienced any loss of sheep or young cattle from their being caught under the mass while settling. A little attention will prevent such a result.

WOBBURN PIGS IN TENNESSEE.

WE make the following extracts from a letter received from WM. C. HAZEN, Esq., Pleasant Home, near Covington, Tennessee:

"There is a considerable move in this delightful region of country in the improvement of stock. In this county, we have a few of the Short Horn Durhams, the Berkshires, Irish Graziers, and Essex half black hogs. I have recently received a pair of South Down sheep from Mr. Bement of Albany, and also a few of the full blood Woburns from Dr. Martin of Colbyville, Ky. I have also the Berkshire and Essex half black; and although they are fine animals, I think they cannot compare with the Woburns. I weighed a Woburn sow pig at three months and three weeks old, and she weighed 116 lbs. At the time of weighing, and for several days before, she had been unwell with a disease unknown to me, a listless, sleepy disposition, refused food, and was broken out in many places on the skin with red spots of the size of a ten cent piece, and hard around that to the size of a dollar. I gave a large dose of castor oil, let her drink slippery elm water, and washed the pores on the inside of her fore legs with warm soap water. She gradually recovered, is now six months old, the finest formed pig I ever saw; head unusually small, heavy sides, and the best hams, without exception, I ever beheld, and will weigh 250 lbs. From what I have seen, I think I shall prefer the Woburn to all other pigs, as hogs that will make the most meat, at the least expense. I will write you next spring how my lambs look from my South Downs.

The hint contained in the annexed extract, we hope will attract the notice of many of our present subscribers: "I am so thoroughly convinced that your paper has done good, and will continue to do so, that I shall with pleasure use my efforts to procure additional subscribers. I would like to see such papers more extensively circulated throughout our country; and as only the readers of these papers are fully sensible of the benefit produced, suppose each subscriber to the Cultivator procures an additional one for 1842. It may easily be done, and I here pledge myself to do so; and if all will, your subscription list for 1842 will be doubled, and what a vast deal of pleasure and profit would be added to the country."

Our correspondent will probably be able to obtain Blacklock's Treatise on Sheep at any of the principal cities of the west. It will be found a valuable work to every sheep grower.

RAPE SEED—INQUIRY.

"MESSRS. EDITORS—Will you please inform me, in your next paper, whether any Rape seed has been introduced in the eastern States? The oil from that seed is extensively used in the cloth manufactories of England, and I believe that seed is yielding more oil than any other vegetable matter. It is extensively cultivated along the banks of the rivers Elbe and Weser, in Germany. Rape seed, in German, is *Rubsaamen*; in Dutch, *Raapzaat*. JOHN ESCHENBURG. Colliersville, Madison Co., Ill."

We have never known the cultivation of Rape attempted in this country. Considerable quantities of it are imported, we believe, for various uses. It is possible it might be a valuable agricultural product.

THE inquiries of A. C. S., (Shusham, N. Y.,) respecting Urate, will be found answered in our replies to other inquirers in our last No. Those respecting Silk, are answered in another part of this paper by Mr. Smith of Baltimore; and those respecting Tomatoes shall receive attention hereafter.

We have on hand several other inquiries, which shall receive as early attention as possible.

WORK FOR THE MONTH.

TREES may be pruned this month; and if orchards are subjected to this operation, as they should be, the fruit will be greatly improved. It is wrong to suffer years to elapse without pruning; since when it is then done, the cutting out of branches of many years growth, makes large wounds, and injures the tree. It will do cattle and sheep good to have the privilege of browsing the prunings as they fall from the trees. A little labor expended on the orchard every year, will be better than heavy and close prunings at once. In pruning, the great object is to so thin the branches, that the sun and air can penetrate every part.

February is a good month to secure a supply of wood, if this important item of domestic economy has not been already attended to. Don't flatter yourself that it is more profitable to burn green wood, or that such wood makes a hotter fire than dry. None but those who get their wood a "drag" at a time through the year, and cut it only as fast as wanted, will maintain such doctrines. If your wood is cut and split, in the woods, a few weeks before it is to be drawn, many tons of water will evaporate from it, and so much is saved in transportation. But in this case you will lose the most of your chips, which, when wood is wholly cut for the fire with the ax, will amount to about one-fifth of the whole. Prepared in the woodyard, most of these are saved. Wood piled in a woodhouse requires air, or it will be attacked with mold and rot.

Sheep, and particularly ewes, will require careful looking to this month. If fed on dry food only as is usually the case, and without access to water, they are very apt to be attacked with diseases arising from costiveness, such as staggers, stretches, &c. although the staggers sometimes arise from worms or grubs penetrating the brain. To prevent disease, the sheep should be fed with cut potatoes, turneps, carrots, or other green food, at least twice a week if once each day, so much the better. They should have salt frequently, and if a load of hemlock or spruce brush, is occasionally drawn to the yard for them they will feed on it with avidity, and with benefit. The weak ones must not be neglected, for if they do not receive the necessary attention now, they will hardly get through the spring months.

Cattle must be salted frequently; it aids their appetites, and is essential to their health. Cattle will do with much less food if kept in comfortable stables, than if allowed to run at large, and are exposed to the cold and storms. Warmth is essential to all domestic animals. Carding or rubbing cattle or horses is a decided benefit to them, cleaning the skin and hair, and contributing materially to health. Change of food is useful. Roots, hay, corn fodder, may be advantageously alternated or mixed, and a good stack of straw for them to amuse themselves upon, will do them no harm. If any animal in the yard is moping, refuses to eat, and has his hair rough and staring, it should receive better treatment, more nourishing food, and proper attention, until improvement appears.

Sometimes the snow disappears in February, and leaves the wheat fields and meadows bare. It is not uncommon at such times to see on some farms, such fields covered with cattle, sheep, or geese, trampling or feeding down the young wheat, or poaching the meadows. This is a bad practice. It is bad for the animals, and it is worse for the wheat, and the roots of grass. Keep your fences up, and all your creatures where they should be, until the proper time for turning them out arrives. Look to the drains in your fields, and see that the water courses are clear. Water flowing over, or standing on winter wheat, is very sure to kill it.

If you have young fruit trees, either in a nursery or orchard, around which the snow is lying, it is a good plan to tread it firmly around them to keep the meadow mice from gnawing the bark, and killing the trees. If the grass is kept from the trunks of the trees, and this precaution is used, trees may be considered safe from mice, otherwise serious losses may ensue.

February is a good month to ascertain the condition of your farming implements, your wagons, plows, harrows, &c. &c. to see what need repairs, and what new ones are wanted. Never undertake to be a farmer without tools. Without such as are necessary, a farm cannot be worked well, or kept in order. If proper care was taken of farming implements, if they were kept from exposure to the storms of winter, and the rain and sun of summer, they would on an average last one-third longer than they now do. There is no surer sign of a slovenly farmer, than to see his wagons, carts, plows, harrows, &c. strung about the streets or fields, and left as they were at the approach of winter, for the season. It is from this and similar instances of improvidence, that farmers sustain losses, that materially diminish their profits, if they do not swallow them wholly.

Often as we have alluded to the subject of the improvement of fruit, we cannot avoid calling the attention of farmers to the matter again in this place. It is so much better to have good fruit than poor, and good fruit may be had with so little care, that indifference is most surprising. The most certain mode of securing good fruit is by grafting; and the latter part of this month is an excellent time to select and cut cions. Label them, and pack in a box in your cellar with moist earth, or bury them in a border, where the mice will not find them. They must not be kept too wet, or too warm, but they ought not to remain dry for any length of time between cutting and using.

Cut up a few potatoes or turneps for your sheep, and

sprinkle on them some salt; it will keep them in good heart and condition. Give your horses once a week a handful of clean ashes with their oats, and they will rarely be troubled with the belly ache, or bots. It is much easier to keep animals in good condition than to restore them after they once become poor; and it is much better to prevent animals becoming diseased, than to have the trouble of curing them when sick.

AGRICULTURAL SOCIETY OF THE U. STATES.

In our last, we noticed the formation of this National Association for the advancement of Agriculture, and we here present the Constitution, which was adopted at that time, for the government of the Society. It presents several points which are of much consequence, and on which, in our opinion, much of the benefit and efficiency of the Society must be depending. One of these is the establishment of the Board of Control; and the other, the duty of this Board to obtain information of, and introduce for the benefit of our agriculture, such seeds, plants, implements, and domestic animals as may be found abroad, and deemed likely to be useful here. This Board of Control must be prudent, practical men, workers rather than talkers, understanding their duty, and willing to perform it. This body must as far as possible be central, that their consultations may be frequent and free.

That such an association as the one under notice can be made of the greatest advantage to the country, no one can doubt, if supported and managed in the efficient manner which should characterize a national institution, and which, from the spirit and energy of the men engaged in the undertaking, we have a right to expect. When we look at the societies of England and Scotland, their national character, the prompt and liberal support they receive, the immense influence they exert, and the incalculable benefits they are conferring, we are unwilling to admit that a similar association cannot be supported, and be made useful here. Unless we are much mistaken, it will be the means of collecting and diffusing much valuable information from the first; and as its means are developed and its ability for usefulness increased, we trust we shall see the Society taking the high rank to which its position and designation justly entitle it.

CONSTITUTION.

The style of this Society shall be "*The Agricultural Society of the United States.*" Its objects shall be to improve the condition of American husbandry, and, from its central position, to serve as a medium of communication and of action with other agricultural societies throughout the Union.

ARTICLE 1. This Society shall consist of such members as shall, at the formation of the same, sign the Constitution, and pay to the treasurer two dollars, and one dollar annually thereafter, as long as they shall continue members.

ART. 2. Any citizen of the United States may become a member of this Society, by paying the fees required for membership.

ART. 3. Any agricultural society in the United States shall become an auxiliary society, upon paying to the treasurer the sum of ten dollars, upon application, and five dollars annually thereafter; and each auxiliary society shall receive no less than five printed copies of the annual proceedings of this Society, and shall also be represented by such delegate or delegates as they may appoint to the annual meetings of this Society, and on all questions to be decided by the Society, such delegation shall be entitled to ten votes.

ART. 4. Any person paying to the treasurer ten dollars, shall receive a diploma of membership for life.

ART. 5. The officers of this Society shall consist of one President, one Vice President from each State and Territory, and one from the District of Columbia, a Recording Secretary, a Corresponding Secretary and Treasurer, and a Board of Control, consisting of five members, three of whom shall constitute a quorum.

ART. 6. The president, and in his absence, one of the vice presidents, shall preside at all meetings of the Society. By the concurrence of the Board of Control, he may call special meetings of the Society, giving public notice thereof, by advertisement, at least three weeks before said meeting. He shall draw all drafts on the treasurer for moneys paid out, which drafts shall be countersigned by the recording secretary; and the treasurer shall at the next annual meeting make a full statement of all receipts and expenditures, setting forth as well the items as the amount thereof.

ART. 7. The vice presidents of the States of Virginia, Maryland, Pennsylvania, and Delaware, and of the District of Columbia, shall be, ex-officio, members of the Board of Control, provided no act shall be done by said Board without the presence of a quorum of the original Board.

ART. 8. The recording secretary shall keep a full record of all the proceedings of the Society, and supervise the publication of them, as may be directed.

ART. 9. The corresponding secretary may be one of the five members constituting the Board of Control, and in addition to conducting all the correspondence of the Society, shall keep a record of all expenditures ordered by said Board, and, in short, perform for said Board all the purposes of a secretary; and shall receive such compensation therefor as said Board, with the consent of the president, may allow.

ART. 10. The Board of Control shall consist of five members, living in or at a convenient distance from this

city, who shall perform all the executive duties necessary to the purposes of the Society, not specifically assigned to other officers. They shall avail themselves of all the means in their power to become acquainted with the agriculture of foreign countries, and through such aid as they may be able to receive from our diplomatic agents abroad, as well as our consuls, shall, if consistent with the pecuniary means of the Society, introduce from abroad whatever they may think materially calculated to improve the agriculture of this country, whether it consists of information as to new and improved modes of culture, seeds, plants, additional articles of cultivation, agricultural implements, or domestic animals, the disposition of which shall be made at the first annual meeting of the Society.

ART. 11. The Board of Control shall also use the necessary means of having a large exhibition, at each annual meeting, of improved agricultural implements and machinery, with a full and public trial of the same; of improved stocks of all kinds, and particularly of inviting the exhibition of such animals as have taken premiums at other agricultural shows, with the view of testing the superiority of prize animals themselves; also, of the different breeds of animals, for the purpose of comparing the advantages of each. They shall affix to such exhibitions such premiums as they shall adjudge suitable, appointing such judges as they may select, to award the same, which judges shall not only assign their preferences, but shall draw up a detailed report of their several examinations, setting forth fully a description of the articles or animals adjudged, and the grounds upon which their preferences are awarded.

ART. 12. It shall further be the duty of the Board of Control, when they think it expedient, to procure a model of such implements and machinery as may have received a premium, to be kept in some suitable and convenient place, selected as an agricultural repository, for the inspection of the public, and particularly of members of the Society.

ART. 13. The said Board may also award premiums for prize essays, to be read before the Society, for well conducted and well reported experiments in agriculture, having reference in the same to the prevailing agricultural productions of the different sections of the Union.

ART. 14. The said Board shall give due notice, by advertisement, of the time and place of such exhibitions, the premiums to be awarded, and the committee by whom they are to be awarded, and for the expense attending the discharge of the duties herein imposed, they shall draw requisitions on the president, setting forth, severally, the items of expense, which requisitions shall be recorded by the recording secretary; and the president, if he approves the same, shall thereupon issue his draft on the treasurer for the amount.

ART. 15. The said Board shall also be instructed to make efforts to obtain funds for the establishment of an agricultural school in the District of Columbia, and appurtenant thereto, a course of public lectures on agriculture, chemistry, botany, mineralogy, geology, and entomology, as appropriate sciences to the great business of agriculture, which, with the buildings and improvements thereon, shall, in the language of Smithson, be set apart forever, "as an establishment for the increase and diffusion of knowledge among men."

ART. 16. The Board of Control shall procure an appropriate seal for the Society, to be attached to diplomas or other documents or instruments which may be issued to honorary members or other persons, under the direction of the Society. They shall fill all vacancies that may occur by death, resignation or otherwise, either in their own body or the list of the officers, to continue until the next general meeting.

ART. 17. In further aid of the purpose of this Society, the said Board shall invite some suitable person to establish an agricultural publication in this city, and shall also petition Congress for the incorporation of this Society.

ART. 18. The first general meeting of this Society shall be in the city of Washington, on the first Wednesday in May next, and thereafter at such times as the Society may direct.

ART. 19. All moneys paid to the treasurer, either for subscriptions or as donations to the Society, shall be deposited to the Society's credit, in such bank or institution as the Board of Control may direct, and can only be withdrawn upon the requisition of the president or acting president, countersigned by the secretary and treasurer.

ART. 20. This Constitution shall be amended only by a vote of two-thirds of all the members present at an annual meeting of the Society; but the Board of Control may, by the aid of the president, establish any needful by-laws for the better order of the Society, not incompatible with this Constitution—which by-laws may at any time be amended by a majority of the Society present.

ART. 21. Elections for all officers of the Society shall be held by ballot at every general meeting thereof; but, until an election at the general meeting in May next, the following persons shall be a committee to appoint the officers herein before mentioned, and to make publication of the same in ten days from this time.

GOOD PIGS.

L. M. WELLS, Esq., Pike county, Mo., informs us that he has two pigs, a cross of the Devonshire, Bedford, and Irish breeds, which weighed, at 61 days old, one of them, 70 lbs., the other 60 lbs.

Original Papers from Contributors.

FERTILIZING QUALITIES OF MARLS, BONES, &c.

MESSRS. GAYLORD & TUCKER—In your No. for December, page 186, the following question is asked: "Is it possible that the blue or green clay or marl of New Jersey, which is so valuable as a fertilizer, owes its power to the ammonia it contains?"

I should consider it too certain to call in question its possibility. When the ocean deposited large masses of shell fish in New Jersey, which constitute their marl beds, the fish must necessarily have been deposited in the shell, and of course large quantities of ammonia been developed during their decomposition, which would be absorbed by the soil mixed with the beds. I should conclude, *a priori*, that the green marl beds would contain more ammonia than the white marls, as ammonia will give a green hue to most soils.

Some years since, I advertised for clays to be sent me, with the view to the finding of fuller's earth, describing the qualities necessary to the composition. I received a great number of samples from several states, and from different counties in the same state, amounting to probably more than two hundred specimens. Among these specimens of clay, were several valuable to the farmer as fertilizers. A sample of white unctuous clay from some part of New Jersey, contained a large quantity of free potash. The gentleman who brought it would not inform me of its locality, as embedded in the clay was found a mass of lignite, fossilized by sulphuretted iron; and he expected to make a fortune from this portion of the product.

Another sample of blue friable clay, from a bank of our North river, was also brought, containing a large quantity of some carbonated alkali, or alkaline earth, which would be highly beneficial for agricultural purposes. The gentleman who brought the latter, informed me the deposit was deep and extensive.

In the same No., page 188, there is an article on "Crushed Bones—mode of action." The writer, on the authorities of Sprengel and Chaptal, assumes that the phosphates are the principal fertilizing ingredients in bones. I differ entirely from the deduction of those celebrated philosophers. It is stated in the table of contents, that one-third of the weight of bones is animal matter, or gelatine; and I consider their fertilizing property to depend greatly more on this constituent product than on the two-thirds consisting of phosphate and carbonates of lime. I shall give my reasons for this opinion, which I think will be satisfactory. There is no doubt that phosphate of lime contains some fertilizing property, but not one-tenth as much as gelatine, weight for weight.

It is well known that neither phosphorus nor phosphoric acid can by any process be converted into ammonia, whilst gelatine is easily converted to it, and affords a very large quantity.

In the making of prussiate of potash, the ingredients used are gelatine, horn shavings, or more solid pieces, hair of animals, and animal matter generally. The two are mixed in an iron vessel, brought to a melted state, and stirred during the combustion. The animal matter contains the prussine, which in its nascent state is taken up by the potash. The great difficulty in the operation is to prevent the prussine from changing to ammonia, and so great is this tendency, that the most skillful operator cannot prevent a considerable portion from undergoing that change. I have sold thousands of gallons of ammonia, collected during this process.

Your correspondent quotes from the second Doncaster Report, "That horn shavings are a more powerful manure than bones, since horn contains only one or two per cent. of earthy matter, the remainder being animal matter or gelatine." From the third Report, "That before the introduction of crushed bones, the ashes of burned bones had been long employed to a small extent in agriculture, but have since fallen almost entirely into disuse."

Put these two reports together, and what do they prove, but that the gelatine taken out of bones by calcination, contains far more fertilizing qualities than the ashes of the bones which remain?

Bones are boiled for several hours by some of the ivory black manufacturers, by which the fat and much of the gelatine are extracted, yet when distilled in a close vessel, a large quantity of ammonia is collected. Calcined bones afford no ammonia.

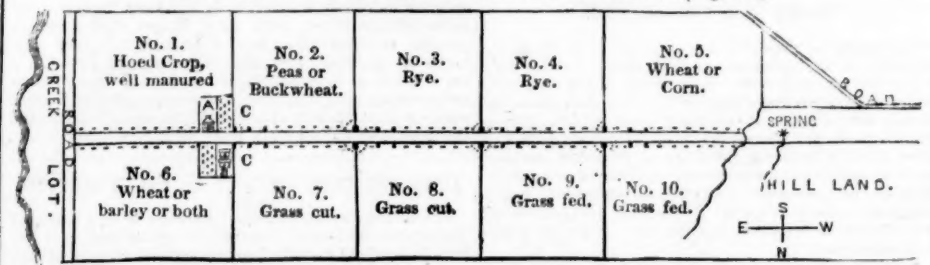
It has never come under my notice that phosphorus, or phosphates of any description, have ever been detected as a component part of any vegetable matter. Prussic acid, on the contrary, is found to be an inherent quality in a large class of plants, shrubs, and trees, the bitter of leaves, flowers, and kernels, being mostly from the presence of this acid, some of them so powerfully impregnated as to afford a deadly poison. There is no doubt that a much larger class of plants would be poisonous, if prussine had not so great a tendency to change into ammonia.

The progress of science, within the last fifty years, has opened to the human mind some faint traces of the secrets of nature, sufficient to show that man, in all he undertakes, is only a feeble imitator; yet enough has been discovered to prove that innumerable operations are silently progressing in the laboratory of nature, displaying Infinite Wisdom in the design, Infinite Power in the execution, and Infinite Benevolence in the adaptations.

New-York, Dec. 24, 1841.

WM. PARTRIDGE.

DIVISION OF A FARM AND ROTATION OF CROPS.—(Fig. 11.)



A. House.—B. Barn.—C. Gates.—Hyphens (---) trees.

The six interior fields contain 12 acres each. Nos. 1 and 6, are larger, but balanced by house, barn, &c. No. 5, larger, so as to include flat land.

MESSRS. GAYLORD & TUCKER—The above plan and rotation system of my farm is submitted to you and the farming community, in the hope of receiving your or their opinion as regards the system, either in whole or in part. Believing that a rotation of crops is the most advantageous as well as the most pleasant mode of cultivation, I made it the first object, on my first commencement on a partially cleared level farm, to make a correct survey of the level part, and then deducted the ground occupied by lane and houses, by which I ascertained twelve acres made a complete square field, as appears from the plan. The importance of a lane must be so apparent to every practical farmer, that it is deemed unnecessary to say much on it. In drawing out manure, and in the crops, or in driving out and in the cows or other stock, the opening of gates between cross fences, and safety of crops in the adjoining fields, is of great benefit in saving time and means; and the gate where the cows pasture may be left open, so that they may have free ingress and egress; and last, though not least, if you have a bad horse to catch, you can drive him out of the field and into the barn in less than no time. In order to save ground in lane, I incline the gates into the fields, which gives ample space to turn a wagon loaded with hay or grain. The gates to be labelled, or contain the number of the field it leads to. In the corners of a cross fence, plant trees of evergreen and other kinds, and thus occupy usefully the part the plow cannot reach for shade and shelter, and place a watering trough on the line of cross fence, the fence passing along its center, so that the two fields pastured as above, (Nos. 9 and 10), are accommodated with water, and the stock still kept separated, and protected in a measure from heat or cold. The creek field is low, and subject to be occasionally overflowed, stands neutral in grass. Field No. 1, manured and planted and sowed with potatoes and turneps, &c., and corn. It is superfluous to say any more, as all speak for themselves in the above plan; and it is only necessary to stretch the imagination to suppose that each successive season the crops shift one step; as, for example, this year No. 1 thoroughly manured and hoed, No. 2 next, and so on, till in the course of ten years No. 1 has produced the successive crops, and cries aloud for its share of the farmer's deposit of manure. On each side of lane are trees planted, and also on road and line fences. West of house and garden, orchard; front of barns, and north of house, orchard.

A PENNSYLVANIA BARN.

Permit me, as my sheet is not quite full, to say that my barn is of stone, with a basement—40 feet by 40—basement 30 1-2 by 40 feet—14 feet allowed for horse stable—If one (east) end, with door in centre, and two windows on each side, which, for the better regulation of the temperature of stable, is made of movable Venetian blinds. The door is jointed and hinged, so that it falls back on the wall. The manure is carried off into back sheds by another door. The height of stable is 9 feet, two feet or over above the barn floor, so that hay kept over the horses may be thrown into their troughs, either cut up or in its natural state, as I have long troughs of hollow pine logs that extend the whole distance. Under the floor and other part of the barn, is a root cellar, with hatches over two of the divisions for emptying them into their respective places. One division, appropriated for potatoes, has a shoot from south side outside of building, as they are very troublesome to handle, where the operation of unloading a Scotch cart load is very soon accomplished. An alley passes through center, and a door opens into it from sheds, and there is also a door from stable into it. The sheds are as high as the horse stable, so that hay for cattle contained over them may be fed from barn floor, and give sufficient head room when shed contains the winter manure. This is only one of those intended to form a square: the other adjoining, will form the angle, (30 feet long.) Thence north, a barn for grain exclusively, with thrasher in southwest angle, and the other running east, similar to that above described; east end for cows. I propose a division fence through yard and one from south to north barn; watering at the junction, so that both yards and both stables may be accommodated without mingling—thence water to pass on to piggery. Part of the above is to be seen executed, and the rest is in a fair way, at the premises of your most obedient servant,

P. FALCONER.

Warren Co., Pa., Oct. 15, 1841.

CULTURE OF INDIAN CORN.

MESSRS. GAYLORD & TUCKER—I now propose to redeem my promise, made some time since, by giving you an account of my crop of corn. There were four acres in the field—one acre of Dutton, two do. of Brown, and one do. of China. The following is the amount of each variety per acre.

1. Dutton.—One acre produced 7,711 lbs. ears; 100 lbs. ears, taken promiscuously, made 82 1-2 lbs. shelled corn—equal 361 1-2 lbs. shelled corn per acre, or 113 bushels 33-1-2 lbs. per acre.

2. Brown Corn.—7,300 lbs. of ears per acre; 100 lbs. ears made 81 1-4 lbs. of shelled corn—equal 5,931 1-4 of shelled corn, making 105 bushels 51 1-4 lbs. per acre. There were two acres of this variety in the field; I know of no difference in it, but think one acre as good as the other.

3. China Tree Corn—third crop, from seed obtained of William Thorburn, Esq. of Albany, in the spring of 1839. It produced 7,020 lbs. ears per acre; 100 lbs. ears made 79 1-2 lbs. shelled corn—equal 5,580 3-4 lbs. of shelled corn, or 99 bushels 36-3-4 lbs. per acre.

The above crop of corn was all raised in the same field; the Dutton and China were on a part of the field that has been under cultivation for a time that extends beyond the knowledge of any of the present inhabitants of our village. The Brown corn was on a part of the field that was broken up to subdue the sweet elder, with which it was covered about six years ago, and has been under cultivation ever since, with a crop of corn or oats, without manure, except the two last summers. The China corn grew on the same acre of ground that yielded me 100 bushels of Dutton corn in the summer of 1840, and 80 bushels in the summer of 1839. For the present crop, the ground was plowed late last fall; this spring, the ground on which the Dutton and China corn grew, had fifteen loads of unfermented stable manure per acre, spread broad-cast and plowed in, the ground marked across the furrows four feet apart for the China, and three feet apart for the Dutton. Corn planted across the marking, the same distance apart, making the China corn four feet apart each way, and the Dutton three feet apart each way. Seed at the rate of one-half bushel per acre, soaked in copperas water and rolled in plaster; the corn thinned down to four spears in a hill at the second hoeing. The China corn was planted 28th May, Dutton corn 29th of May, and the Brown corn 2d and 3d of June. The corn was hoed three times, and worked twice with the cultivator—no hilling allowed; the ground kept as level as possible. I commenced cutting up the corn at the ground, the 16th September, and put it in small stouts to cure.

The Brown corn was planted in rows three feet apart, and hills from sixteen to eighteen inches apart in the row; manured in the hill with fifteen loads unfermented manure per acre; three-fourths bush. seed per acre, soaked and plastered as the above. A part of this corn failed to come up, from bad planting on coarse manure in the hill; it was replanted about the 12th June. This corn suffered more from drouth than where the manure was spread broad-cast; it suffered in earing, also, from being left too thick in the hill, causing the ears to be short.

I was absent from home at the time of hoeing and thinning the corn. On my return, about the last of August, I saw the fault, and inquired of the man who had charge of it, why it was not thinned as I directed; he said "it looked so over when they hoed it, that the men all thought it a pity to destroy it;" so they killed it with kindness; but it was too late to remedy the evil, and I let it go with from five to ten stalks in a hill. This corn was cultivated in all other respects as the above. I think with proper management I can get a much larger crop of this kind of corn per acre than I have this year.

By measure, the Brown corn will outshell the Dutton, as will the China, but they both fall short by weight, as will be seen above—the Brown 1 1-4 lbs. in 100 of ears, and the China 3 lbs. in 100 of ears.

The China corn makes a beautiful meal for family use, but is too late a variety for elevated lands in this latitude. The acre of China corn produces about four tons of fodder, the Dutton three tons, and the Brown two tons. The Brown corn produces more corn for the amount of stalks than any variety that I have cultivated.

I am anxiously waiting for a statement of the method pursued by Mr. Osborn in raising 144 bushels of corn and 130 bushels of oats per acre; also Mr. June's statement in reference to his crop of oats, both of which I trust will appear in the Cultivator. I never have had any success in raising oats, and am desirous of learning how it is done by others, who do succeed. I should be glad to learn something about raising barley: which is

the best variety to cultivate, which the best method of cultivation, what amount of seed per acre, &c. &c. If some of your readers would furnish the information, they would confer a favor.

MAKING PORK—A SUGGESTION.

I have kept an account of the food that I fed to my hogs this fall in fattening them, and find it exceedingly difficult to make pork for \$3 50 per 100 lbs., when corn will sell for 50 cents and potatoes at 20 cents per bushel. I may give you the particulars hereafter. Would it not be well for our farmers to ascertain the cost of making pork, by making some fair trials? If it should turn out to be better for them to give their hogs away and sell their grain, than to make pork, it is time they knew it; or if they can make pork profitably, by the introduction of improved breeds of swine, let them learn by the trial of fair experiment which breeds are the best, for I will guarantee they will never be the wiser from learning the result of such experiments as Dr. Martin and his friend tried between the Woburn and Berkshire sows, which the Doctor gives an account of. Yours, &c.,

E. CORNELL.

Rhaca, N. Y., Dec. 27, 1841.

HORSES—ORIGIN OF THE MORGAN BREED.

In my communication on this subject, published in the late October number, I have expressed too confident an opinion in saying I believed that the original horse was of French Canadian origin. I have recently had some acquaintance with a Morgan horse, endowed with all the peculiarities of the breed, sufficient to make me forbear any decided opinion on the point in question, until very clear evidence is adduced. The affidavit which I furnished is only probable and not conclusive testimony that the original horse was of Norman French descent, and procured in Montreal.

The horse which has been with me of late is one of those called, from being in-bred, a full blooded Morgan—an absurd term, for it is impossible that a descendant can inherit full blood from a single progenitor. The term *full blood* or *thorough bred* can only be used with propriety where the distinctive appellation is derived from a race or sort which furnished both parents; thus we may say a thorough bred or full blood English race horse, a full blood or thorough bred Alderney cow, if both sire and dam were of the breed or sort designated. The term *thorough bred*, however, has heretofore been almost exclusively applied to race horses, because for centuries before the present, the racing breed of horses has unfortunately been the only breed of animals highly cultivated, and of which the pedigrees could be proved by written or printed documents.

All the accounts, being not less than half a dozen, which I have heard of the origin of the first Morgan horse, agree in this, that one Justin Morgan of Randolph, Vt., from whom the name was derived, owned the animal while he was yet a colt. Doubtless there live persons who can testify to his origin, whether or not it be such as represented in the late affidavit. The public would not only be gratified, but greatly benefited by such evidence. There has probably never been another stallion whose stock for thirty or forty years have produced so much net profit to the growers.

I will now endeavor to point out what appear to be the chief points of distinction between the Morgan breed and the horses of Norman French descent, produced in Canada. Let me premise that a great variety of races exists in the Canadian breed, yet all clearly impressed with a certain general character. The broad, courageous looking head, with the ears far apart, thick neck, general stoutness of frame, full breast and strong shoulder, with a round or fleshy croup; the low set muscles and large sinews, with those tough feet, that know not disease, are distinguishing marks of the French Canadian horse. The shagginess or abundance of hair in the mane and tail and on the legs, are much owing to the severity of the climate, with the manner of rearing the animals, and may be expected in a great measure to disappear under good cultivation, long before the innate excellencies and peculiarities will perceptibly change.

The Morgan horse does not partake of all these marks in common with the Canadian. The clear and deep toned bay color, too, which prevails in the Morgan, is rare among Canadian horses. It occurs in individuals; but, unless characteristic of the race for a long period of time, it could hardly be supposed that this color would so generally occur as it does in the Morgan horses of the present day. Peculiarities produced by a single cross are apt to wear away in a few generations, unless maintained by careful selection on the part of the breeder. If, then, (supposing the Morgan horse to have come from Canada,) his color was an accidental variety, it would not have so generally marked his numerous offspring, unless great pains were taken to preserve it by selection, which has not been the case. It appears evident, from the prevalence of this color through several successive generations, as well as the similar descent of various qualities, which are authenticated as having belonged to the first known sire, that the Morgan horse, whatever may have been its origin, was of one pure stock; that is, that he was not cross bred, or produced by the union of two different breeds; for in that case, there must have been a greater variety in his progeny, some running to one family and some to the other, whereas a remarkable similarity is known to prevail in all of this race. And here we may notice that the breeder is apt to find an essential difference in the two races: the Morgan, crossed or

mixed with the various common breeds, inclines to retain its peculiar characteristics and its small size in the offspring for many generations, while all the French Canadian races, though not larger for the most part than the Morgan, when used as a cross, increase the size of the progeny, and frequently assimilate so that the blood can only be recognized by a practiced observer, in the greater development and robustness of form, and the courage, spirit, and aptness to thrive, which are commonly reckoned as constitutional health.

The Morgan differ essentially from the Canadian horses in their action or mode of traveling. A Morgan horse glides over the ground eight or nine miles an hour, with such easy movements of his legs, that one would think they only felt relieved when so employed; the Canadian, if he has speed, seems to go by main strength, every stride arising plainly from a purposed exertion of his powerful muscles.

Another principal dissimilarity is in the endurance of the feet; and here the Canadian horse has all the advantage. The Morgan appears to be subject, as much as equally strong constituted horses of any breed, to founder and other diseases of the feet, while with the Canadian such ailments are less known, perhaps, than with any other breed in the world. There are numbers of horses in Canada that, under a mass of shaggy hair, possess dry, sinewy legs, on which the severest service never raises a wind-gall. The legs of the Morgan, though destitute of long hair, have this excellent conformation in a very high degree.

The Morgan is a great traveler, an untiring all-day horse, but seldom a very fast trotter or galloper, and less frequently a perfect saddle horse. The Canadian, if he has the power of rapid locomotion, inclines for the most part to put forth his energies only for a short time, and then to take a leisurely gait, as if a slight sense of fatigue overbalanced the alacrity of his nervous system. There are, however, splendid exceptions to this description, horses that, with no light load behind them, will travel eighty and even ninety miles in a day. Some of the lighter footed Canadian horses, too, are very pleasant under the saddle, though in general the weight of the neck and uprightness of the shoulder disqualify them for this use. The head of the Morgan, though not less energetic, is somewhat dissimilar to that of the Canadian. The ears of one are upright, of the other more apart. The head of the Canadian horse is broader at the upper part than that of the other. Each has a great breadth between the eyes, which is considered a sure indication of energy in an animal. The Morgan has the best open nostril for wind and bottom, more like that of the race horse; and the whole of the muzzle, as well as the eye and ear, indicate more breeding, or a longer period of cultivation, than those of the Canadian. There is a difference of shape observable throughout the whole figure. The Morgan is long in the side, but always short on the back, and strong and beautiful in the loins. His fine shoulder, too, differs from that of the Canadian horse. It is deep, well sloped, comparatively thin at the top and heavy at the bottom, serving, conjointly with a wide chest and the fore legs set far apart, to give the horse an appearance of strength and endurance scarcely to be looked for in one of his spirit and fleetness.

The high crested neck and thick, wavy tail of the Morgan, show much of the character of some races of the Canadian.

Whether the Morgan be a scion of the Canadian stock, or be derived from the Dutch or some other breed which has disappeared in the United States, appears to be a question of some importance to those who would make good selections in order to improve the breed of horses; and whoever can throw any light upon the subject will gratify a large portion of your readers by making known his information through the *Cultivator*. If the French Canadian did not supply the Morgan, I, for one, should be glad to learn what other breed has ever been known upon this continent that could boast such excellent qualities for common service as are universally admitted to distinguish both of these breeds.

GEORGE BARNARD.

Sherbrooke, L. C., Oct. 25, 1841.

FRAUD IN THE MANUFACTURE OF SALT.

MESSRS. GAYLORD & TUCKER—Permit me to draw the attention of the public, and especially of law makers, and those whose duty it is to see that the laws are faithfully executed, to an outrageous imposition, a *base fraud*, which is being, or at least has been, perpetrated upon more or less of our citizens in the article of *salt*. I have pronounced it a base fraud: it is more; for, in its operation, it does not only unjustly and dishonestly take from one what rightfully belonged to him, and appropriate it to the use of another, but renders perfectly valueless that which cost much and is worth much in supplying the daily wants of mankind. The grievance complained of consists in the introduction of so large a quantity of *lime*, in the manufacturing of the article, as to destroy its antiseptic properties in the curing or preservation of animal food.

I am informed that the liberal use of *lime*, in the manufacturing of salt by boiling, makes it handsomer, and perhaps has a tendency to facilitate the process. It matters little what the motive is which induces the amalgamation of *lime* with this valuable and indispensable article, but all are interested in its effects. I will state to you the somewhat expensive experience I have had in this matter, as facts are justly considered the best arguments. A few weeks since, I put down several barrels of pork, very nice and sweet at the time of

packing; used over one bushel of salt (so called) to every two hundred pounds of meat, and covered it with a very strong brine. Some three or four weeks afterwards, upon examination, I found it nearly worthless. The meat appears to be literally covered with *lime*, and is utterly unfit for table use. Unfortunately, I am not the only one who has thus been imposed upon.

It appears to me that this is a subject that calls for immediate and thorough investigation by the proper authorities; and if those whose especial duty it is to take cognizance of it omit to do so, then it behooves the people to devise means to nip in the bud so vile an imposition and base infraction of their rights.

I trust this communication will be sufficient to enlist the attention of those whose immediate province and duty it is to remove the cause of complaint. Its importance must be acknowledged by all. Will not the editors of our agricultural papers bring their aid to the accomplishment of the object? The agriculturists are deeply interested.

A FARMER OF CAYUGA CO.

EARLY WHITE WHEAT OF VIRGINIA.

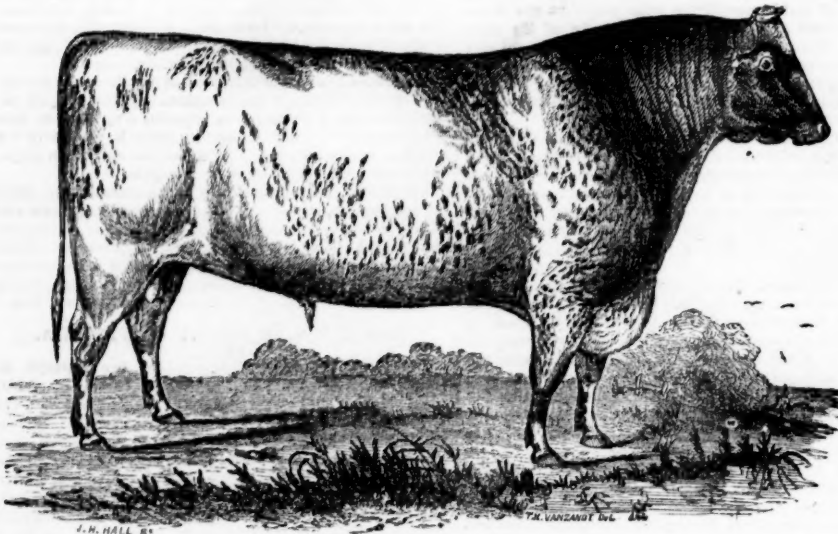
MESSRS. GAYLORD & TUCKER—In the autumn of 1837, Mr. Cocke of Virginia sent a barrel of White May Wheat to the former editor of the *Cultivator*. The following is an extract from Mr. Cocke's letter accompanying the wheat: "Of late years, in this part of Virginia, we have seen some of our favorite kinds of wheat go almost entirely out of use, from gradual and successive failures, while other kinds of inferior quality have taken place of them, in consequence of their superior productiveness, attributable to no other cause, as far as we can see, but having been produced in different soils and other climes. The early May White wheat of Virginia, which first gave superior character to our flour, and the Mexican wheat, very similar to the early May White, are now rarely heard of among our agriculturists. Not doubting that these varieties would be very valuable in any quarter of the wheat raising region of our country, where they would be new, and being anxious, for the general interest of agriculture, that they should not be lost, as, doubtless, after some acclimating in New-York, they may again be returned advantageously to the south, I have been at some pains to procure a barrel of the first mentioned kind, which I have sent to you at Albany. By putting it into the hands of some of your careful farmers, I am persuaded they will find it a valuable acquisition. The specimen sent has an appearance of being yellow or red wheat, but this is owing to its having been raised for a succession of years on red land; upon grey soils, it would soon return to its native whiteness. For the beautiful and large proportion of superfine flour to the quantity of grain, we have never found any wheat to equal the early White May, until our soils became tired of it. The early May wheat will do well, sown any time in October, or on very rich land in November; in short, I think it not improbable it would do with you as a spring wheat, sown in February or March, fully as well as the Florence."

Through the favor of Judge Buel, I received one peck of the White May wheat. On the 28th of March, 1838, I sowed one quart, from which I obtained eleven quarts of badly shrunk wheat; that, with the remainder of the peck, I sowed on the 12th of September following, on land summer fallowed; on the remainder of the field, I sowed White Flint wheat; all sown the same day. Their appearance in the spring was very similar; as the season advanced, the White May came forward faster than the White Flint, and in heading out, the White May was two weeks earlier than the Flint. At harvest, the May wheat was plump and a fine berry; the Flint was so badly shrunk that the millers would have seventy-three pounds for a bushel; it ripened prematurely, being struck with the rust, which was very general in this vicinity in 1839. On the 13th of September following, I sowed the White May and the White Flint on summer fallowed land, the same field, and on the 17th, some of the White May in a separate field. The quality was very similar in every respect, except the White May was fit to cut one week the earliest; both varieties plump and fine; the berry of the White May retained its red appearance, and weighed sixty-six pounds to the bushel, the Flint sixty-three. On the 14th of September following, I sowed the White May on summer fallowed land, and on the 3d of October, three acres on potatoe ground; my Flint was sown on the 10th, 11th, 12th, and 17th of September.

The White May that was sown on the 3d of October was in head and ripe the same time the White Flint was that was sown on the 10th of September. The cold and wet, through the month of April and more than half of the month of May, injured my White May more than it did the White Flint, but not as much as it did several other varieties that I have under cultivation. My late sown White May was not more than half as good as that sown on the 14th of September; the berry was good; it retained its red appearance. It is a bald wheat, white chaff, the head some heavier than the Flint. For late sowing, on unfavorable soil, it is not as valuable as the White Flint. I have sown but a small quantity this season. I shall test it for a few years more, to see if it will not regain its former quality. Mr. Jones of Rochester was in Virginia in the fall of 1840, and saw some of the White May wheat, and was so pleased with it, that he sent home ten bushels for himself and ten for Mr. Ely. It was late before it arrived, was sown out of season, and proved a failure.

RAWSON HARMON, JR.

Wheatland, Monroe Co., N. Y., Dec. 16, 1841.



IMPROVED SHORT HORNED BULL "ARCHER."—(Fig. 12.)

OWNED BY J. M. SHERWOOD, ESQ., AUBURN, N. Y.

Which obtained the first Premium at the Fair of the New-York State Agricultural Society, at Syracuse, Sept. 29th, 1841.

"ARCHER" is in color mostly white, with a roan head and neck—his body has some roan spots—was bred by F. Rotch, Esq., Butternuts, Otsego Co., N. Y. Calved 15th of June, 1837. Sired by ROLLO.

Dam, Adaliza, by Frederick, H. B. 1060	
G. " Adelia by Orpheus,	473
G. G. " Alvide by Alfred,	23
G. G. G. " Strawberry by Winsor,	698
G. G. G. G. " Old Dairy by Favorite,	252
G. G. G. G. G. " Old Dairy by Punch,	531
G. G. G. G. G. G. " Old Dairy by Hubback,	319

ROLLO, sired by Patriot, (Herd Book) 2412	
Dam, Romp by Admiral,	1608
G. " Moss Rose by Young Denton,	963
G. G. " Rosa by Young Denton,	963
G. G. G. " Ruby by Denton,	198
G. G. G. G. " Old Red Nose by Frunnell,	659

CATTLE—THE AYRSHIRES.

Messrs. GAYLORD & TUCKER—I have seen, in a late number of your paper, a letter over the signature of A. B. Allen, stating, among other things, that "we can make Ayrshires by the thousand here, by crossing Durham bulls on our best native milkers." I think this would certainly be something very desirable, if it can be accomplished, as the Ayrshire breed of cattle stands unrivaled for their milking qualities, and for the good quality of the butter and cheese produced from it. Advertisements of the two latter articles are to be found in many parts of Britain. If such a breed can be as easily "made" as Mr. Allen says they can, the sooner we go to making them the better, and begin with the "best" Durham bulls that we can find in the country, even at the present time, without waiting for Mr. Allen's importation next year, from the only "one man's herd that can improve our own." (Query. Does the best breeder of Durhams in England sell his "best" cattle?) That such a cross as is recommended by Mr. Allen would greatly improve the form, if not the milking qualities, of our native stock, whether the best or the worst milkers, does not admit of a doubt, but that it would produce Ayrshires is quite another question; and, in my opinion, is an idea too absurd to be entertained for a moment by any person who possesses a fraction of the knowledge of these matters that is generally ascribed to Mr. Allen; and I would caution all those (if there are any such) who put faith in Mr. Allen's doctrine, not to be disappointed if the result, as asserted by him, does not happen. The person who cannot detect the difference between such a cross, or even of a cross between the Ayrshire and native, which would certainly be more like the pure stock, and that of a pure blooded Ayrshire, must have a very unpracticed eye indeed. Did Mr. Allen ever see a cow from such a cross, which looked like an Ayrshire? If so, will he be so good as to inform us where, that we may have an opportunity of judging for ourselves, or will he be kind enough to give us some good evidence of the fact? for I think we require something more than his mere ipse dixit, that we may go to work with some good hope of success. As the breed is now becoming "popular, and all sorts of impositions" are likely to be "practiced" on it, we ought to be very cautious in believing assertions, even from high authority, if not backed up with evidence: we have had too much quackery already in many things. Will Mr. Allen "stake his reputation as a breeder and his judgment as a man," that the Ayrshires are a cross at all? Or if so, will he risk the same stake, and inform us what that cross is? so that we may have the Yankee privilege of guessing for ourselves whether the same blood now flows in the veins of the "best native milkers" and Durham bulls that flowed in the veins of the cross from which the Ayrshires were produced, (if produced from any cross,) so that we may expect like causes to produce like effects. I have just returned from "personally perambulating" a portion of the States and Canada, to the extent of nearly three thousand miles, and have seen some of the "best" herds of cattle in the country through which I passed, both of native and imported stock of different breeds; I have also seen crosses

of Durham bulls on native cows, and of Ayrshire bulls on native, half blood Durham, and Canadian cows; and I think that a cross from the latter bull would be more likely to resemble the Ayrshires than that of the former, and would, I think, be the likeliest way of "making" Ayrshires, if there is any truth in the doctrine that like produces like. (Has Mr. Allen found out a better way?) Now I will "stake my judgment as a man," having seen hundreds of the pure breed in their native country, that, if Mr. Allen would present even the most favorable of these crosses before the good people of Ayrshire, and call them by their name, that they would be as ready to scout the idea, and perhaps consider it as great an imposition and insult, as the people of Berkshire would that of the "white, black, blue, gray, and all sorts of colored pigs," being called by theirs, and would, if asked the question, "what do you call them?" be as much puzzled to find a name, and as likely to give the same answer, viz: "we don't know—they are not our sort."

It is no doubt presumption in a humble individual, whose name is scarcely known to my next neighbor, to dare to doubt or boggle in any way at the assertions of one who I suppose is considered first rate authority in such matters; but such men are able to do the greatest amount of evil, either from error of judgment or some other cause, as people are seldom deceived by those in whom they place little or no confidence, and of course are on their guard against "imposition;" and as I happen to know a little about Ayrshires, I think I am Yankee enough to guess that they cannot be made in the way that Mr. Allen asserts; but if he can prove it, I shall acknowledge my error.

Lowell, Mass., Jan. 1, 1842.

ALEX. RICE.

VERMONT AHEAD IN AGRICULTURE.

Messrs. GAYLORD & TUCKER—In looking very attentively at a map of the whole territory of the United States, we may discover, away up in a cold corner, the outlines of a state which occupies but a small portion of the paper, with mountainous pictures that nearly fill the whole boundary, which a Frenchman would tell you was *Vert Montagne*, (Green Mountains.)

According to the late census of the agricultural products of the Union, Vermont takes the lead in producing many of the most important articles of consumption and export. If we take into consideration her size and population, she enumerates the most sheep—produces the most pounds of wool—tons of hay—pounds of maple sugar—bushels of potatoes—the greatest value of products of the dairy—and value of products of the orchard. In ratio of population, Vermont beats all her sister New-England states, in raising the most bushels of wheat and oats—the greatest number of horses, neat cattle, and swine—and is next to the head in producing corn, rye, buckwheat, poultry, and silk cocoons.

In making an estimate of the money value of the agricultural industry of the several states of the Union, including all their productions, compared to the population of each state, it appears that Vermont produces in value \$148 to every inhabitant, and but three other states produce more than \$100 to each head of population, viz:

Mississippi \$111, Arkansas \$108, and Louisiana \$106. The average products of all the states is \$77 50 per head. Vermont takes the lead, and must certainly be considered the most enterprising, industrious, and thrifty agricultural state in the Union.

Previous to 1838, many of our smart, able, and enterprising inhabitants emigrated west, to the "lands flowing with milk and honey," yet there still appears to be remaining in "the land of steady habits" many industrious sons. Is this the secret why the state should be free from debt, and sustain a sound currency? Perchance it might have been still better for us and the whole Union, if many other states had early taken pattern from industrious Vermont. "A word to the wise is sufficient."

TO PRESERVE TIMBER.

I am satisfied that if timber be impregnated by a solution of blue vitriol in water, it will preserve it for a great length of time. I have received this impression from the fact, by an experiment on basswood, which is a very light, soft wood, of a pale color, and one of the first and most noted kinds of wood to be subject to early decay with us. It is of no value for timber, if exposed to dampness.

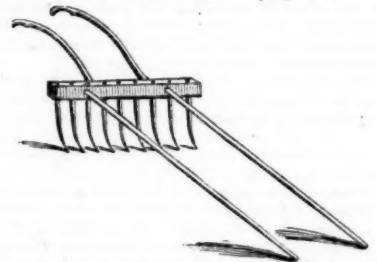
Seven years since, we cut a green basswood, and took therefrom a log eight feet long, one-half of which was grooved out and converted into a trough. It may be interesting to some of your readers to state the use to which this trough was converted. After being partly buried in the ground, with the bark on, boards were fastened up at each side of it, one end of which entered a small enclosure for sheep; flocks that were infected with the foot-rot were obliged to pass out through this trough, in which we constantly kept about two inches of warm vitriol water, at the time of using.

Last season we had occasion to remove this trough, which was supposed to be wholly decayed; but to our surprise, on examination, we found it to be as sound in every part as when laid down. On splitting, its adhesiveness proved very firm, and it had acquired nearly the solidity of rock maple. This wood had remained on the ground seven years, where it was always subject to wet and dry; on examining other portions of this tree, they were, as expected, most wholly decayed.

I have no doubt but this solution may be profitably used to preserve many kinds of timber that are subject to the moisture of the earth, or exposed to wet or damp stagnated air, like the dry rot, which is a disease very incident to the best kinds of building timber, such as flooring boards, and is very destructive to vessels. I presume this solution may be infused into living timber by a very simple process, the invention of which was discovered by Dr. Bouchery, for which recourse is had to no other force than capillary attraction, by which trees take up their sap—a notice of which may be found in the last volume of the Cultivator. S. W. JEWETT.

Middlebury, Vt., Dec. 28, 1841.

A STONE SCRAPER.—(Fig. 13.)



Messrs. GAYLORD & TUCKER—In the construction of turnpikes, when first introduced into the United States, the usual plan was to form beds of large stones, and on the tops thereof to break smaller ones, to the depth of six or ten inches. By the passage of heavy burdened wagons, it was found that the large stones became loosened, and the smaller ones working under, caused them to rise to the surface, thus injuring the face of the road.

The publication of a treatise on Road Making by Mr. McAdam of England, entirely changed the former system. He dispensed with the beds of large stones, and recommended breaking the whole to an uniform size—say four ounces, at the road side, and thence scattered on to the road with shovels. This plan, though tedious, has continued for years. In the repairs of the National road, my attention was drawn, a few days since, to a simple and rudely constructed machine for putting on the small stones from the road side, as a substitute for the shovel; and as it evidently answered a good purpose, and a great saving of labor, I am induced to give you a description and rough drawing of the machine. The person using it told me the usual quantity put on by a man in one day on the old plan, was ten perches, and that with this machine a horse and man, in the same time, could put on one hundred perches.

A piece of tough hewn scantling, three feet long, six inches square, into which are inserted iron teeth of 1 1/4 inch square bar, two feet long in the clear, bent and pointed as represented in the cut. Strong handles are attached to the scantling behind, and a pair of shafts before. When operating with it, the driver bears heavily on the handles, to prevent the machine from bouncing from its hold.

JAMES L. BOWMAN.

Brownsville, Pa., Dec. 21, 1841.

TRAVELING MEMORANDA—No. 7.

EDITORS OF CULTIVATOR—On the 13th of November, I brought my long agricultural tour to a close, in that most pleasant of all other places, to the fond husband and father, HOME. It will be gratifying to you, and a great number of your readers, I am well assured by the kind treatment I met with among them, to learn that I reached my "home in the west" in safety, and found my family in health and comfort.

You are aware that it was my intention again to leave home about this time, to attend the first meeting of the National Agricultural Society at Washington, on the 15th of this month. But circumstances beyond my control, one of which is a severe cold, contracted during my tempestuous voyage round the lakes, have induced me reluctantly to forego this duty and pleasure—that is, the pleasure of the hope of doing good, which would have overbalanced all the fatigue of a winter journey, if my health had been such that I had dared risk the undertaking.

My tour through the United States forms an era in my life that I may reflect upon during the remainder of my time, with more interest than I can upon any other period of my life. It has given me the strongest assurance that spirit has been awakened throughout the country, within a few years past, that is calculated to do more good than all the political vagaries which have of late agitated the world.

The inquiry is in every man's mouth, "what shall be done to improve the agricultural interest of the country?" The extensive and increasing circulation of agricultural papers, the increasing interest in attendance upon the fairs of agricultural societies, all speak well for the cause of the farming interest, the first and best interest of this present great, and to be greater, agricultural country. I have been made aware that great good could be accomplished by public spirited individuals traveling as I have done through the country, stirring up and awakening the lethargic feeling of the farmers, and urging them to arouse themselves to take the stand in the first rank of society, that their occupation entitles them to hold. The prejudice against "book farming" is fast giving way to a growing anxiety after scientific knowledge, as applicable to the cultivating the soil.

I have been astonished at the interest manifested to become acquainted with one who had no claims to notice except as an agricultural writer; and proud as I may justly feel of the honors heaped upon me wherever I went, I am only proud on account of the convincing proof it gives me of the noble disposition of my countrymen to honor those who are devoted to the object, and who ardently desire to see improvement in the bulwarks of society, rapidly increasing.

Rapid increase of wealth, in speculation or stock jobbing, does not always indicate the best state of morals in society. But show me a community rapidly increasing in wealth by improvement in agricultural pursuits, and I will insure you that the morals of that community are in a healthy state.

But I forget that my moralizing does not continue my journey, and that there are sundry small items in my note book, that may be more interesting to your readers than my present writing.

My letters which you have published have been dated at various points on the road, but as I have progressed more rapidly in my traveling than in my writing, I must now make up lost time at home. As I passed along, I saw so much to interest me, that my letters unavoidably run into particulars, perhaps tediously lengthy.

My last, I believe, was from Baltimore. From thence I took the Philadelphia rail road, which passes over a great deal of poor, level country, and an uncommon number of long bridges. At Wilmington, I visited Dr. Lockwood and Dr. J. W. Thompson, two prominent friends of agriculture, as I find to be more often the case among physicians than any other profession.

Dr. Thompson is President of the Agricultural Society, and to his energetic exertions, in a considerable degree, may be attributed the great good that has been effected by this society. The power of one man to accomplish wonders is indeed wonderful. By the judicious use of manure, marl, and lime, the poor worn out farms of this part of Delaware have been doubled in value within a few years past, and now show a state of fertility that was considered impossible for them ever again to attain, after having been "skinned" for more than a hundred years.

I visited one of Dr. Thompson's farms, upon which I saw a peach orchard of an hundred and fifty acres. He also keeps one hundred cows, for the purpose of raising calves for the Philadelphia market. As soon as one calf is taken off, another, which is purchased for the purpose, is put on. Some of the cows had two calves, and some calves had two cows. This way of using milk he finds very profitable.

While viewing his peach orchard, I learned a fact well worth the attention of all peach growers. Let the trees branch as much as possible from the ground, and never cut off a limb that is broken down by an overload of fruit. If it hangs on by wood enough to keep it alive, let it lay, and it will sprout up next year most luxuriantly, and then produce the finest kind of peaches. The ground between the trees is kept well plowed.

Around Wilmington there is a good deal of thorn hedge, but it does not generally look flourishing. But the general state of agriculture does, as I was still more convinced by what I subsequently witnessed at the Fair of the Agricultural and Horticultural Societies, which I

attended on the 15th of September. At this fair, I saw Mr. Canby's celebrated Durham cow, Blossom, that gave 36 quarts of milk a day, and 17 lbs. of butter a week. Although a fine looking cow, I have seen many others that, for appearance only, would take the premium. There was also exhibited a common cow, and a very ordinary looking one too, that afforded 15 lbs. of butter a week.

As an evidence of the flourishing condition of this Society, I will mention that they have a considerable fund on hand, out of which their annual dinner is provided, free for all members and invited guests, among whom I had the honor to enjoy one of the most agreeable public dinners that I have ever partaken of. And the pleasure was not a little heightened by the presence of the lovely goddess of Temperance.

I saw here the sample of sugar made from corn stalks, and became acquainted with the manufacturer, and heard him describe the process, of which much has been published of late. I am inclined to think that this is not all humbug. Should it be found successful on further experiment, the advantage to the west will prove incalculable; for here the corn can be sown broad-cast, upon cheap land, easily cultivated without manure, and yet produce a great crop.

It was painful to me that I had no spare time to spend with the numerous interesting acquaintances that I made here.

I left this delightful town the next morning after the fair, in company with several gentlemen who formed a delegation from the Philadelphia Society, to interchange civilities with their Delaware friends. This is exactly as it should be: it keeps up friendly social intercourse, and tends to increase knowledge and happiness. The visits, too, of distinguished strangers, at such a time, serves as a most valuable stimulant to incite praiseworthy exertions. This is a matter well worthy the attention of all agricultural societies. Send delegations to visit one another.

While in Philadelphia, I met with our mutual friend, C. N. Bement, and with him visited several places of interest, including the Wilmington Fair. We also visited Westchester, and enjoyed the hospitality of Dr. Darlington, known as one of the most scientific writers on agriculture. We also visited Paschal Morris' and Joseph Cope's farms, as well as many other of the highly cultivated farms of the Brandywine hills.

Mr. Cope is known as an importer of Durham stock and South Down sheep, a beautiful lot of which he had on hand. I look upon this as the best breed of sheep for general use in the country. Those desirous of purchasing, may depend upon the genuine article from Mr. Cope.

Mr. Morris is a large breeder of Durhams. We saw here a horse power churn, which makes 100 lbs. of butter at one operation. The apparatus is simple and cheap. Any person desirous of obtaining information about it, will find by making application to Mr. M., that he is a "gentleman farmer"—which means a man of intelligence, and who is always ready to devote his time and abilities to the promotion of improvement among his brethren.

I wish he would also publish a description, and his opinion, of a wheat sowing machine that we saw at his farm.

At one of the farms which we visited, I was struck with the appearance of a fine lot of fat oxen, fed entirely upon grass, which is one of the most luxuriant and profitable crops that grow upon these hills. These oxen are driven, while lean, from the north part of Ohio, and no doubt many of them had while young been driven from the interior of Indiana or Illinois to Ohio, there used for work while in their prime, and then driven to Pennsylvania to eat up the surplus grass, and in turn to be eaten up by the surplus population of Philadelphia.

At the same farm, I saw a very simple and cheap apparatus that forces water forty or fifty rods, up a steep hill, to the house and barn. A lever, about twenty feet long, with a weight at one end and a water box at the other, is hung in the stream, and covered over with a roof, around which, in winter time, straw is placed to prevent freezing. While the end of the lever upon which is the box, is up, a stream of water runs in, and the weight of that overbalances the weighted end of the lever, and down goes the box, striking a pin in its descent that opens a valve and lets out the water, when up it comes for a new supply, each movement of the lever making a stroke of a force pump that sends the water in one perpetual, never tiring stream up the hill.

Instead of feeling as though we were troublesome visitors, seeking our own gratification, we were everywhere made to feel more like one affectionate brother visiting another. We were assured that our hosts rather considered it an honor than a burthen to entertain us. Oh! how I wish agricultural brethren would extend the custom of visiting one another. Much good and much pleasure would come of it.

After our return to Philadelphia, we went, in company with the excellent editor of the Farmers' Cabinet, a short trip into New Jersey, and at the farm of Mr. Edward Tonkin, about fourteen miles from Camden, saw some of the finest specimens of fat Durham oxen, I venture to say, in the United States. Mr. T. is a large breeder of Durhams, and has done what but few breeders would do, that is, to alter some of his best bull calves for the purpose of showing what can be done with this breed of cattle for beef. He also has one spayed heifer. These heaves are now about five years old, and it was the opinion of several gentlemen present that

the largest ox would weigh 3,000 pounds. They are to be fed another year. Taken together, they are one of the most beautiful shows of fat cattle I ever saw.

On our return, we visited the old "Haddonfield house," built of bricks and timber imported from England. We now look upon the importation of bricks as ridiculous. When shall we get our eyes open wide enough to see that many of our present importations are more ridiculous, and more detrimental to the best interests of the country?

This house, still in a good state of preservation, is owned by a gentleman by the name of Wood, who owns "those chickens" that can eat corn off of a flour barrel standing on end. They are tall subjects.

I was surprised to learn that in this state, so celebrated for peaches, the trees have entirely failed. New Jersey peaches are now no more.

And now, my dear readers, if you are as tired of reading as I am of writing, you will be glad that I come here to an abrupt close—promising, however, that you shall again hear from your old friend,

SOLON ROBINSON.

Lake C. H., Ia., Dec. 1841.

ON THE CULTURE OF POTATOES.

MESSES. GAYLORD & TUCKER—I have long been satisfied that in planting potatoes, farmers have been in the habit of using too much seed, and have for several years planted all mine with from three to six eyes in a hill. I one year planted three acres with twenty-five bushels; two feet and nine inches apart each way, commencing with one bushel of whole potatoes; after which I planted about one-third of the piece with three eyes in a hill, and the remainder four; and have for my own satisfaction, at other times, planted whole large potatoes adjoining those planted with three or four eyes, but was not so particular as to count and weigh the different products, till the last season—satisfying myself with measuring in a basket, rows of equal length, it not occurring to me that there was any difference in the number of potatoes. The last season, I determined to be more particular, and now send you the result for publication. I am aware that a difference in the soil, season, or in the varieties planted, or some other cause, may vary the result; yet I am satisfied that with pink-eyes, four eyes are sufficient for a hill, and as that is the only variety I cultivate, I know not but it may be different with others. Owing to the severe drouth of last season, my crop was light, yet I think that would not materially affect the experiment. I planted different quantities of seed, which I shall distinguish by numbering the rows. They were planted across the rows of manure, so as to make them equal, and when I harvested them, I selected twenty hills from each number, their chances equal in all respects, as far as I could determine, and counted and weighed the product.

No. 1—All large potatoes, had in number	368	wt. 40	1-4 lbs.
No. 2—6 eyes in hill, cut from large potatoes,	292	"	39 1-4 "
No. 3—4 " " " " "	220	"	44 3-4 "
No. 4—2 " " " " "	230	"	45 "
No. 5—All small whole potatoes,	260	"	45 1-4 "
No. 6—6 eyes, cut from small potatoes,	362	"	41 1-4 "
No. 7—4 " " " " "	270	"	49 1-4 "

I consider the difference in the product of the last three numbers of little consequence, as it might have been accidental, the small potatoes having but about six eyes each; though if it proves any thing, it is, that four eyes are better than six, and that small ones are better than large; but with the large ones the result is very different in the number of potatoes produced, No. 1 having 148 more than No. 3, and weighing 4 1-2 pounds less. That, I think, accounts for the objection so many make to raising pinkeyes, on account of their producing so many small ones, the whole potatoe making altogether too much seed, for they have more eyes than any of the common varieties, large ones having from fifteen to twenty each. In some of the hills I planted with large ones last season, I counted thirteen stalks.

No. 4 is the first experiment I ever made with two eyes in a hill, never supposing them sufficient; still the product is better than the average, and it is not improbable that further experiments may prove that quantity of seed the most economical. I trust this subject will attract the attention of some of your readers, and that they will try the experiment for their own satisfaction, and publish the result for the benefit of others, so that if my conclusion prove correct, others may be induced to depart from the practice of their fathers, so far as to profit by it. Yours, respectfully,

DANIEL J. CURTIS.

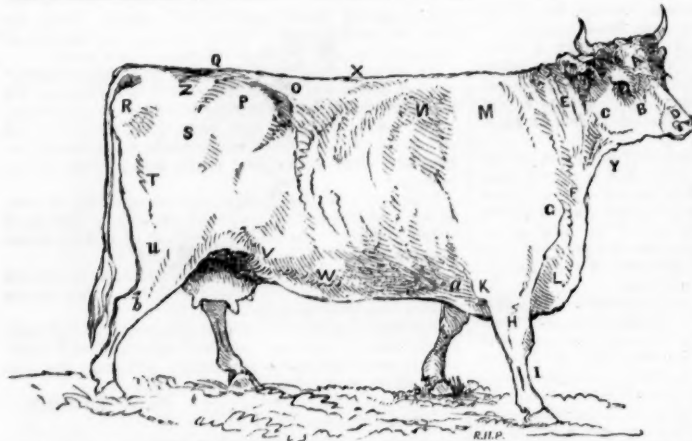
Canaan Centre, N. Y., Dec. 8, 1841.

LARGE EARS AND CROP OF CORN.

MESSES. EDITORS—I have two ears of corn in my possession which it would do you good to see. They were raised upon the farm of Mr. George Shuman of this county. They are of the gourd seed species, one yellow and the other white. The white ear measures fourteen inches in length and ten and a half in the middle in circumference; is eighteen rowed, and contains, on actual count, 1,185 sound grains. The yellow ear, fourteen and a half inches in length, fourteen rowed, eight and three-fourth inches in circumference, and has, on count, 988 grains. The soil is a sandy loam, and Mr. Shuman thinks will yield him 100 bushels shelled corn per acre.

JOHN HUGGINS.

Liverpool, Perry Co., Pa., Jan. 1, 1842.



EXPLANATION.

- A—Forehead.
B—Face.
C—Cheek.
D—Muzzle.
E—Neck.
F—Neck vein.
G—Shoulder point.
H—Arm.
I—Shank.
K—Elbow.
L—Brisket, bosom, or breast.
M—Shoulder.
N—Crops.
O—Loins.
P—Hip, hocks, or hockles.
Q—Crupper bone, or sacrum.
R—Rump, or pin bone.
S—Round bone, thurl or whirl.
T—Buttock.
U—Thigh, or gaskit.
V—Flank.
W—Plates.
X—Back, or cline.
Y—Throat.
Z—Hind quarter.
a—Chest.
b—Gambrel or hock.

MESSRS. GAYLORD & TUCKER—In compliance with your request, I have outlined and lettered the figure of an animal, for the convenience of those who may be at some loss as to the whereabouts of certain points and parts frequently alluded to under terms which, it seems, are not always familiar to some of your readers.

I am aware that it is a meagre reply to your correspondent's inquiry; but the fear of missing an opportunity by which I hope to forward the block, must be my apology.

Yours, &c.,

FRANCIS ROTCH.

Butternuts, Otsego Co., N. Y., Dec. 1841.

FARM REPORT.

MESSRS. GAYLORD & TUCKER—After reading the statements of several farmers in Hartford county, Ct., in the January number of the Cultivator, I concluded to give you an account of the income of my farm. I cannot give you an account of the current year, for my crops are not all sold. I will give you an account of the year ending in July, 1841. This statement is for cash received for the produce raised on the farm, not including what was consumed by a family of six persons. I will offset that against my labor, for I "either hold the plow or drive." My farm contains eighty-five acres, including ten acres of wood land: it is divided into fifteen lots, fenced with stone wall. I keep three cows, two pair of oxen, a pair of horses, and three or four small cattle. I do not keep any account of the butter made from the cows; that is consumed or disposed of by my family. About the 20th May, I commence mowing my door yard, (which contains two acres,) for my oxen and horses, and it keeps them well until after harvest, when I turn them to pasture. In this statement, I have given the average price I received for the articles. The hay brought me from \$10 to \$15 the ton; the potatoes 31 cents to 40 cents the bushel; apples from \$1 to \$2 the barrel, &c. I have omitted the fractions, for the sake of brevity.

RECEIPTS.	
Sold 26 tons of hay, at \$12,	\$312
820 bushels of potatoes, at 35 cents,	287
135 barrels of apples, at \$1 50,	202
414 bushels of cider apples, at 10 cents,	41
491 " " of do, at 4 cents,	196
2,380 lbs. pork, at 6 cents,	141
93 bushels of corn, at 69 cents,	65
36 " " rye, at 75 cents,	27
3 calves,	12
Poultry,	10
	\$1,408

EXPENSES.	
Paid for labor,	\$362
" manure,	110
" lime,	26
" gypsum,	10
" salt, for an experiment,	10
" grass seed,	27
	\$445

Profit,

Yours, &c. TYLER FOUNTAIN.

Peekskill, N. Y., January, 1842.

CULTURE OF INDIAN CORN, RUTA BAGAS, &c.

MESSRS. GAYLORD & TUCKER—I have raised the greatest crop of Indian corn this year that I ever raised. The corn was very thick on the ground, and almost every stalk had an ear, very many two, and some three. I had between four and five acres, the half on stalk land, which looked as well as that on sod, until the dry weather came on. It had no manure this season, and was not near as good as the sod of course, but had over eighty bushels. On the sod, had over one hundred and thirty; and to my great astonishment, one acre had one hundred and forty-four bushels. I thought my men must have been mistaken in the measurement, and had them measure it all over the second time. The result was one hundred and sixty-nine and a half bushels, holding near one and three-fourths bushels.

My ruta bagas have been better, much better than last year, but not over half a crop—five hundred and fifty-six bushels.

My sugar beets did remarkably well until the drouth, when they were attacked by some kind of fly, which deposited its eggs on the leaves, which soon hatched, producing a worm about one-fourth of an inch long, of a streaked yellow and black color, which commenced eating them off. This worm disappeared about the last of August, when the beets took another start, and yielded about what I consider half a crop—552 3-4 bushels on an exact acre—the same land that I attempted to raise ruta bagas on last year, manured again, with 20

loads. I am not discouraged yet with the sugar beet, for I consider them the best crop for cattle that I raise. I last winter fed sixteen head of young cattle, (two year olds,) only 1 1-2 bushels of beets per day, thrown out in the yard, where they had a stack of straw to go to, which I kept renewing, so that they had plenty of that, and nothing else save the beets through the whole winter, only as they might by chance once in a while get a mouthful of hay or stalks, when they were let out to drink, which the cows and sheep had left; and I certainly never saw any cattle feel better and look more healthy than they did in the spring. They would fight and play like the best of fat steers, and are now fat on grass. I think that some gentlemen expect too much from beets or other roots; they think to fat cattle, hogs, &c. on them as on corn, and because they are disappointed, they call sugar beets, &c. worthless. I think that beets or ruta bagas, given to cattle with a small quantity of meal, is excellent feed for fattening them, and for hogs, cooked and thickened with meal, so as to make a beet pudding, fats my pork well. They are admirably adapted to the health of my flocks, and I consider an acre of beets, when a good yield, equal to four acres at least of good meadow, for wintering my stock, particularly milch cows.

I had ninety-three bushels of Mercer potatoes from one-fourth of an acre, while on the same quantity of land, had but half as many pinkies. I suppose it was because the Mercers had come to maturity before the drouth affected them, being earlier.

J. F. OSBORN.

Port Byron, N. Y., January, 1842.

SALE OF CREAM POT CATTLE.

MESSRS. GAYLORD & TUCKER—I attended the late sale of Col. Jaques' herd of the celebrated "Cream Pot Cattle," which took place at the "Ten Hills Stock Farm," Charlestown, Mass., on the 11th inst. The weather was cold, raw, and unpleasant, which probably had the effect to dampen the feelings of those who attended for the purpose of making purchases. Consequently, the sale went off dull and languid, and very little competition or spirit was manifested on the occasion.

From the celebrity which these cattle had obtained for their rich milking or butteraceous qualities, and from the fact of their being of a rich red color, most desired by our eastern and northern farmers, I had every reason to expect a large concourse on the ground, ready and willing to patronise one who has labored so long and so ardently and so enthusiastically to establish "a breed that would transmit the properties most desired for the dairy, the shambles, the yoke, &c." How far the Col. has been remunerated, the auctioneer's hammer has testified.

In the catalogue, it is asserted that this breed of cattle "are pronounced, by the best judges in this country, equal, if not superior, to any known." Where were all these "best judges" on this occasion? Why have they kept back? Why have they not come forward, and shown, by their deeds, a willingness to substantiate their assertions, and patronise this effort of an individual "to rear a race of animals combining, in a great degree, all these properties"—the dairy, the shambles, and the yoke? "Tell it not in Gath! publish it not in the streets of Askelon!" that this celebrated herd of Cream Pot cattle was struck off to the highest bidder, at an average of thirty-two dollars per head!!

It was asserted on the ground at the sale, that \$500 had been offered and refused for the cow, "Betty;" and this, too, was the famous cow that had produced the extraordinary rich milk, the cream of which has been converted into butter in the twinkling of an eye, or forty seconds.

The cows were clean and in good condition, and certainly looked well for their keeping, which was said to be "nothing but hay." Their hair was sleek and glossy, skin loose and elastic, which was evidence of good health and condition. I regret I cannot say as much of

the bulls and calves. With one or two exceptions, they were not in such condition as I expected to find them, and which operated in my opinion very much to depress the prices to so low a figure.

"Don" and "Gem" appeared to be the Colonel's favorites, and well they might be, for they were noble animals, and far superior, in my humble opinion, to any of the others—they were Durhams, in red coats. In form and general appearance, as compared with the native cattle of the country, they were certainly much superior; still I must beg leave to differ in opinion with my valued friend, A. B. Allen, that they were "good Ayrshires," although they were a cross of the Durhams on native stock.

The Colonel certainly deserves great credit, to say the least, for making this attempt to rear a race of cattle, combining those much desired qualities, "the dairy, the shambles, and the yoke;" and I could not help sympathizing with him, for he appeared dejected and disappointed on witnessing his favorite cattle sacrificed, his hopes blighted, and his darling project frustrated.

C. N. BEMENT

Three Hills Farm, January 4, 1842.

CULTURE OF INDIAN CORN.

MESSRS. GAYLORD & TUCKER—Permit me to give you a statement of the management and produce of one acre of land: it was pasture, which had laid two or three years, manured and plowed in the month of November, harrowed in the spring, and plowed three times; planted with corn about the 20th of May; rows about three and a half feet apart; two grains in a hill, about one foot apart.

EXPENSE OF CULTIVATING.

Manure, about,	\$10 00
Plowing first time,	2 00
Plowing three times, and harrowing,	6 00
Planting,	1 50
Hoeing three times,	6 00
Cutting up and husking,	8 50
	\$34 00

PRODUCE.

185 bushels of ears of corn, at 25 cents	
per bushel,	\$46 25
Stalks, about,	15 00
	\$61 25

The corn is of first rate quality, weighing nearly 60 lbs. to the bushel. It would have been a pleasure to have known how many bushels of shelled corn there would have been; but as I have adopted the principle of feeding out grain, rather than disposing of it to be made into whiskey, I have had some of it ground with the cob, being more economical.

A. W. NURSE.

Cazenovia, N. Y., Jan. 1, 1842.

WEIGHT OF FIVE PIGS.

EDITORS OF THE CULTIVATOR—I herewith enclose the weight of five pigs of one litter, which I killed on the 13th inst. They were from a Chester county sow, by James Thornton's (of Byberry) celebrated Berkshire boar, and were pigged the 23d day of 5th mo., which makes them exactly twenty-nine weeks old. Even at the extremely low price of pork at present in our market, I would be amply repaid for all the grain they have consumed, being considerably less than fifty bushels, including corn, oats, and broom corn seed.

Their weight, when dressed, was as follows:

No. 1,	244 lbs.
No. 2,	232
No. 3,	213
No. 4,	182 3-4
No. 5,	177

1,048 3-4

Making the average of 209 3-4 lbs.

Yours, &c. WM. H. HOWELL.

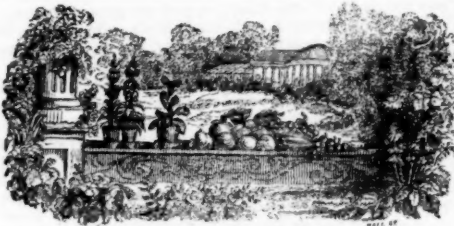
Sunny Side Farm, Montgomery Co., Pa., 12th mo., 1841.

IMPROVEMENT IN SHINGLING.

MESSRS. GAYLORD & TUCKER—Some months ago, one of your correspondents recommended, as a means of increasing the durability of oak shingles, the dipping the point of the nail in white lead, ground in oil; but a method of putting on oak shingles, commonly called lap shingles, has been adopted by some of our neighbors, which they think superior to all others. The shingles are placed in the same manner that lap shingles usually are, but instead of driving the nail in the butt, it is driven in the middle of the shingle, so that the butt of the next shingle covers the head of the nail, and protects it, and the wood round it, from the weather. Some may think the butt of the shingle will rise with the action of the sun; but if it should, it will still be fast in the middle, and will come down again in wet weather; the nail head being protected from wet, the wood will not rot round it, and it will remain firm as long as the shingle lasts, while those nailed at the butt are liable either to draw out the nail, or the nail head draws through, thus leaving the shingle loose. A saving of expense is also effected by the proposed method, as smaller nails will answer to nail the shingle in the middle.

J. B.

Brownsville, Pa., 12th mo. 30, 1841.



The Garden and the Orchard.

ORNAMENTAL TREES AND SHRUBS.

EDITORS OF THE CULTIVATOR—I propose to give you a list of some of our most common ornamental trees and shrubs, suitable for the plan I gave in the last No. of the Cultivator. I freely confess that my knowledge of them and their culture is too limited to do the subject justice, but an imperfect attempt may be useful.

The object, of course, of ornamental planting, is to render home delightful; and whatever contributes to this object the most effectually, more especially during this dreary season, stands first in importance.

Shrubs and trees are rendered ornamental in winter, by their branches or bark, by their berries, and by evergreen leaves. Among the first, may be named,

The red dogwood, (*Cornus alba*), sometimes called red willow, which has bright red stems and branches, and which, if they grow densely, are quite showy in winter and early spring. They vary much, however, in brightness, and the very best only should be selected for transplanting. Though growing naturally in swamps, this shrub succeeds well on common rich soil, when removed. It is seven or eight feet high.

The striped maple is admired for its beautifully striated bark; ten to twenty feet high.

The golden ash is rendered ornamental by its fine yellow bark. It grows thirty feet high.

The white birch is distinguished by the silvery color of its trunk and larger branches, and attains the height of thirty or forty feet.

In planting these, they should as far as practicable be so placed as to be rendered conspicuous by objects beyond; as, for instance, the red dogwood and golden ash should be relieved by a white building when seen from the walk, and the birch by a dark colored building, (as brick,) or by dark evergreens.

Among some of the finest ornamental berry-bearing trees and shrubs, are,

The mountain ash, rendered elegant and remarkably beautiful in winter, by its large, pendant clusters of orange scarlet berries. The large fruited American species is decidedly the finest for richness of appearance.

The bush cranberry, (*Viburnum opulus*), which is common in swamps, is much improved by removal and culture, and succeeds well, if placed in a dug bed, filled with muck, where it often bears red clusters of fruit, six inches in diameter, which retain all their brightness till spring.

The barberry is eminently beautiful, from its delicate racemes of red fruit.

Several species of thorn are quite showy, from the scarlet color of their berries. Some varieties of the most common native, (*Crataegus punctata*), and the large scarlet, (*C. coccinea*), are most conspicuous. The evergreen *pyracantha*, if well sheltered and trained low, retains its fruit and foliage through winter. If planted beneath the shelter of taller evergreens, it would doubtless succeed best, and would add much in appearance to the shrubbery. All these are either small trees or shrubs.

The finest situation for the above, is near dark evergreens, where the bright crimson and scarlet clusters will most strikingly contrast with the dark rich green of the trees behind.

None of our deciduous trees, (except such as the above, and a few early flowering,) are a source of much beauty, unless in foliage; this is rarely the case for more than five months in the whole twelve. It is in this respect that evergreens possess such eminent superiority. Where a dwelling is surrounded by them, and the view at a distance is shut out—except when that distant view may be worth preserving,—and especially where they enter largely into the formation of the outer border of the surrounding grounds, their cheering effect, during the bleak winter months, is indescribable. Spring flowers, planted beneath their shelter, would bloom much earlier; and many plants, otherwise too tender for the open air, would thus survive the winter unharmed. Plantations of evergreens would also greatly diminish the severity of cold winds in bleak situations. It is familiar to many that a house, well sheltered by woods, requires the consumption of scarcely one-half the fuel for warming it, as one much exposed. Evergreens would produce the same effect, and in this point of view be highly economical.

The white pine, (*Pinus strobus*), is decidedly the finest tree of the genus indigenous to the northern States. The lively green of its rich, silky plumes, renders it strikingly ornamental. The pitch pine, (*P. rigida*), though less graceful and of stiffer appearance, when its growth is dense, is exceedingly fine and beautiful, and is well worthy of a place in every plantation of trees.

The balsam fir, (*P. balsamea*), although like most of the sub-genus *Abies*, of more symmetrical regularity

than picturesque expression, is scarcely inferior in beauty to any evergreen, except the silver fir. The silvery white surface of its leaves below, and the clear green above, give a liveliness to its appearance which few others possess.

The European silver fir, (*P. picea*), strongly resembles the balsam fir, but is a larger tree, and has much larger foliage, which, superadded to the fine qualities of the latter, render it eminently worthy of a place in all ornamental grounds.

The white spruce, (*P. alba*), and black spruce, (*P. nigra*), are handsome trees. The former is much improved by thrifty growth in rich soil, and its light green color contrasts finely with the dark hue of the latter.

The hemlock, (*P. canadensis*), from its great abundance, is much underrated as an ornamental tree, but the color, denseness, and graceful freedom of its foliage, when growing well in open grounds, and not overshadowed by other trees, place it conspicuously among our spruces. Of course this will not be admitted by those whose prejudices impel them to denounce whatever is common; but the intrinsic beauty of the works of creation is not affected by prejudice.

The Norway fir, (*P. communis*), though of less lively color in its foliage than most others, excels them in the graceful pendant sweep of its branches, and as a fine evergreen is scarcely inferior to any, and superior to most. Its growth is perfectly straight, and its form symmetrical, and as a single tree, to stand alone, is exceedingly beautiful.

The American arbor vitae, or white cedar, (*Thuja occidentalis*), is a handsome tree in winter, and being, when thrifty, of very dense growth, and also easy to transplant, it is well fitted to form ranges or hedges, for screens from severe winds. The brown hue of its foliage during winter, though an objection, may be used to advantage by mixing it with trees of livelier color, to increase the variety of expression, and avoid the uniformity too apt to appear in large plantations of evergreens. Downing says that the stem rarely measures more than ten or twelve inches in diameter, but I have frequently measured stumps of this tree three feet high, that were three feet, and some four feet in diameter.

The red cedar, (*Juniperus canadensis*), is a fine evergreen. Though not of handsome form, the appearance of its dense masses of purple berries, partly concealed among the dark branches, give it a peculiar wildness and beauty, hard to describe. Its growth is very close and dense, and it is consequently admirably adapted for hedges.

The common Juniper, (*J. communis*), retains a much livelier color through winter, but is of smaller size.

The tree box, the English yew, the Chinese arbor vitae, the satin, and several others of low growth, are also deserving of attention.

Most of the preceding trees and shrubs, it will be observed, are more or less common as natives of the United States, and they may be procured and transplanted with little difficulty. Nearly all, which are deciduous, are of very easy removal; those from swamps and wet grounds, if transplanted into a dug bed of swamp muck, mostly succeed well; and if situated where they may receive the washings from higher grounds, (which will be retained by deep beds of muck through a long season of drouth,) scarcely any will fail. Many trees from swamps live, and soon become accustomed to dryer soil, if carefully removed, without this precaution.

It must be obvious to every one, that trees taken from the open ground or the outskirts of woods, are better and more easily transplanted than those growing in the midst of thick forests, where they are slender, with few branches and few roots. In the humid climate of Scotland, trees of great size have been successfully removed; but in this country, the attempt should not be made on any much more than 20 feet high at the extreme. It is often exceedingly desirable to produce an immediate effect in grounds by trees of considerable size; but the check which they receive in their growth by transplanting, is more than compensated by the increased vigor of smaller ones, when the work is done in the best manner.

Every tree whose diameter is two inches, should have the earth carefully removed from the roots to a distance of at least two and a half feet on each side, when it is taken up, and all the small roots should be carefully preserved. When set out, the hole should be of full size to receive all these roots without bending, and they should be well and carefully bedded as nearly in their natural position as possible, in finely pulverized, rich earth. I was much amused to hear a person, in pointing out the reason of the great want of success in transplanting trees in this country, describe his own mode, which he considered decidedly a superior one. He first dug a number of holes two feet across, then went into the woods, bent the trees over, (such as were about two inches in diameter,) hitched his oxen to the top, and cutting off two or three of the largest roots, drew the trees up, and afterwards set them out. If this was a careful mode, what must be the general practice?

Trees of larger size may be prepared for removal by digging the earth away from the roots, cutting these all off at a proper distance from the trunk, and again filling in the earth. If the soil thus removed were replaced with richer or manured soil, the effect would be better. A large number of new roots are thrown out to supply the place of those cut off, and when after a year or two the tree is removed, these roots are scarcely injured, and success rendered nearly certain.

Doing the work well, is always the most economical,

as it is cheaper to dig up ten trees, remove them, and set them out well, than to transplant thirty in a hasty manner, and lose twenty of them, though the time employed on each tree may be only one-third.

Pines and other evergreens are generally regarded as of exceedingly difficult removal, and many persons are thus entirely discouraged from the attempt. But if properly managed, the difficulty vanishes. Those of smaller size, which are inured to open cultivated soil in nurseries, succeed well; but when taken from their native localities, they require peculiar treatment. As much earth as practicable should always be left on the roots, and to secure this end, it will be found that those from swamps and muck land, where the roots are more perfectly matted with the soil, will always be best, even though removed to the driest upland. When transplanted, the roots should have a very shallow covering of rich earth, and be protected from the drying heat of the sun by a coating of leaves or other litter; and an occasional watering, in dry seasons, would be beneficial. This mode of treatment will apply to the white pine, the balsam fir, the white spruce, the hemlock, and many others. The arbor vitae, (or white cedar,) when growing in swamps, usually has a dense mass of short roots near the surface, and by cutting round a single circle with a spade, it is taken up with the greatest ease, and if then set out according to the preceding mode, scarcely ever fails of success. But its removal from upland, I have found far more difficult. Some species of pine, which grow on barrens, or on sour soils,* will never grow when transplanted in land of a different quality. Success is only insured by carrying a large portion (as half a cart load,) of their own native earth with them to form a bed for their reception. J. J. T.

SELECT LIST OF FINE ROSES.

MESSRS. GAYLORD & TUCKER—The annexed list of roses embraces a selection of good and distinct varieties, which may be depended on by those who are unacquainted with them:

MOSS ROSES.

1. White Moss, a much admired but scarce variety.
2. Perpetual White Moss, or White Mossy Four Seasons, flowers in clusters, very sweet scented, and flowers sometimes in September, but not always a second time.
3. Pompon, or Mossy de Meux, or Button Moss, flowers small, early flowering, a very desirable variety.
4. Common or Old Moss, a variety known to all.
5. Crested or Crestata Moss, a singular variety, perhaps as much admired as any of the varieties of the Moss rose.
6. Crimson or Scarlet Moss, wood and flowers darker than the Old Moss, but a freer grower, a better variety.
7. Mossy Moss, leaves and wood mossy.
8. Luxembourg Moss, a new variety, grows very freely, the darkest flowered Moss rose we have.

WHITE ROSES.

9. Madam Hardy, said to be the finest White rose known; when first opened, a little tinged with blush. H.
10. Black Superb, a pure white rose, fine.
11. Brown's Venus, pure white, small, a scarce variety, very difficult to root.
12. Hybrid White, a good rose. H.
13. Unique, or White Unique, a well known old variety, and much admired.
14. Striped Unique, much like the white, but often has a red stripe, and sometimes the one-half of the flower red; much admired variety.

DARK ROSES.

15. George the Fourth, or Black Cabbage rose, a free grower and bloomer, one of the finest of dark roses. H.
16. Miralba, a superb dark rose, like the Tuscany in color, but much more double, and altogether a finer rose.
17. African, a good dark rose.
18. Black Iris, very dark and double, flowers small, wood slender; a dwarf grower.
19. Roi de Nigres, a fine dark rose.

MIXED COLORS.

20. Cabbage, or Cabbage Provins, a rose that will be always admired.
21. Leda, blush margined with pink.
22. London Pride, fine light rose color. H.
23. Village Maid, striped, the best striped we have.
24. Royal Greatness, deep rose color, large and double.
25. Violet Blue, a fine bluish purple.
26. Favopieus, one of the best rose colored roses.
27. La Turtelle, or Turtle Dove rose. H.
28. Pallagi, one of the finest red roses. H.
29. General Foy, or Red Cabbage rose, a fine variety.
30. Ceresette, an abundant bloomer, light rose color.
31. Belle Alliance, or Tri-color, a singular and beautiful variety, not a full double, but much admired.
32. Purple Ravelle, a half running variety, small, but an abundant bloomer; color dark.
33. Harrison rose, yellow, the best hardy yellow.
34. Austren, a single variety, one side of the petals yellow or orange, the other red; a desirable variety.
35. Double Detroit or Michigan rose, with flowers similar to the Cabbage rose, perhaps the best climbing rose.

Those marked with H. are hybrids, mostly tall growers, none of which flower well on the wood of the former year; the wood ought to be two years old to have them flower well. To have a fine and abundant bloom, the shoots ought to be thinned out, but not cut down, as is the practice of some with their roses, it is well to bend them down in the fall, and cover them with a little earth or manure, to keep them from the alternations of freezing and thawing.

JAMES WILSON.

* Indicated generally by the growth of sorrel or broom grass, (*Andropogon*).

Domestic Economy.

UNDER this head, we propose to devote a part of the Cultivator, monthly, to a record of such articles of domestic management, cookery, &c. as may be furnished us, or may come under our notice. As the department is undertaken principally for the benefit of our numerous lady readers, we think we shall not be considered as asking too much, if we request them to aid us in making it more generally useful and acceptable, by their contributions. Our female friends who have before aided us in these matters are entitled to our thanks and those of our subscribers: we hope not only they, but others, will give this appeal a favorable consideration.

MAKING BREAD.

EVERY one imagines they know how to make bread, and almost every one can wet up flour and bake it, but it by no means follows they know how to make bread. To make good bread, good flour, good yeast, and good management are requisite. One of the simplest processes of making good bread is as follows:—To eight quarts of flour, add three ounces of salt, half a pint of yeast, (or good sweet emplings,) and three quarts of water, of a moderate temperature, and the whole being well mixed and kneaded, and set by in a proper temperature, will rise in about an hour, or perhaps a little more. It will rise better and more equally if the mass is covered. It must undergo a second kneading before it is formed into loaves for the oven. The more bread is kneaded, the better it will be. Be careful not to allow your bread to become sour in rising. Milk is by some used instead of water in mixing their bread. Milk will make white bread, but it will not be as sweet, and dries quicker than bread made with water. If loaves are slightly gashed with a knife around the edges, before they are put in the oven, cracking will be avoided in baking. From an hour to an hour and a half is required to bake bread fully.

Sponge Bread is made by taking three quarts of wheat flour, the same quantity of boiling water, and mixing them carefully together. When lukewarm, add a tea cup full of common, or a little less of distillery yeast, and set the mass in a warm place to rise. When light, knead in flour till it will mold well; then let it rise again, when it is to be molded into loaves, and baked.

French Bread or Rolls is made by taking half a bushel of fine flour, ten eggs, a pound and a half of fresh butter, a pint of yeast, or more if not first rate, and wetting the whole mass with new milk, pretty hot. Let it lie half an hour to rise, which done, make it into loaves or rolls, and wash them over with an egg beaten with milk. In common French rolls, the eggs and the butter are not uncommonly omitted, but their addition makes the bread decidedly better.

The following bread has been found very useful for those to whom fine flour bread was injurious:—Of good wheat, ground fine but unbolted, take three quarts, one quart warm water, one gill of fresh yeast, one gill of molasses, and one tea-spoonful of sal eratus. Make two loaves, bake an hour, and cool gradually. It has sometimes been called dyspepsia bread.

No kind of bread should be put into an oven too hot, as a crust will be formed, and the proper rising prevented. Heat your oven thoroughly, but let the first flush heat pass off before your bread is put in. If you fling in a little flour, and it browns in about a minute, put in your bread; if it burns black, wait a few minutes. There is much depending in every family on the bread used, and the greatest care should be taken to have it sweet and of good quality. Bread should never be put on the table till twenty-four hours after baking, where health and economy are consulted.

MAKING MINCE PIES.

THE winter is the season for finding good mince pies on the table, and when well made, there are few things more palatable; of their conduciveness to health, we say nothing. Any kind of lean meat will make pies, but the best is neat's tongue and feet; and if these cannot be had, then beef shank. The meat must be boiled till perfectly tender, cleared from the bone and the hard or gristly parts of the meat, and chopped fine. To this must be added an equal weight of tart apples, also chopped fine. Much of the goodness of the pie will be depending on the fineness of the materials. Cider is good to moisten with, and sugar with a little molasses used to suit the taste. Mace, cinnamon, cloves, salt, &c. to be added at pleasure. The pies must be made on shallow plates, and baked from half to three quarters of an hour; there must be holes in the crust while baking, made by pricking or cutting, or the juices of the pie will escape.

If rich pies are wanted, moisten with wine or brandy, in part, and add raisins, citron, and Zante currants, with the grated rind and juice of lemons.

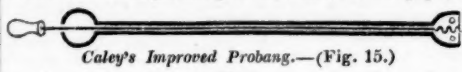
It is sometimes desirable to keep some of the meat prepared for pies for use at another time, particularly among farmers who do not have ready access to markets. We have found that meat prepared as below will keep for months, in a dry, cool place, without injury. To a pound of finely chopped meat, add a little fine suet, an ounce of mace, an ounce of cinnamon, a quarter of an ounce of cloves, and two tea-spoonfuls of salt; Zante currants and seeded raisins, half a pound of each, and a quarter pound of citron to be added, if desired;

half a pint of wine or brandy, three table-spoonfuls of molasses and sugar to make it quite sweet, is added. The whole is packed in a stone pot, covered with a brandied paper, or with a thin layer of molasses. To make pies of this, nothing is necessary but to add equal weights of apples, chopped fine, and perhaps more spices and sugar.

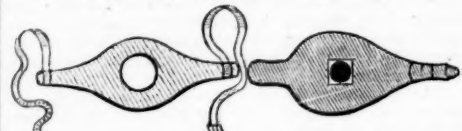
Veterinary Department.

CALEY'S IMPROVED PROBANG.

At a meeting of the Executive Committee of the New-York State Agricultural Society, held at the city of Troy, on the 16th of June, I presented for their inspection one of "Caley's Improved Probangs." It attracted considerable attention, and was favorably noticed and recommended in their proceedings; and now, as the season has arrived for feeding cattle on roots, I have thought some account of its usefulness and structure would not be uninteresting to the readers of this paper.



Caley's Improved Probang.—(Fig. 15.)



Gag and Strap.—(Fig. 16.)

Bellows.—(Fig. 17.)

The *Æsophagus Probang* (fig. 15) is a leathern tube about 4 1-2 feet long, 1 1-2 inches in diameter, with two egg shaped bulbs, one of which is perforated with small holes, and an aperture in the end of the bulb sufficient to pass a good sized corkscrew, which is attached to a rod sufficiently long to pass the tube and fasten into the obstruction, whether an apple, potatoe, or piece of turnep. With the assistance of the rod and screw, substances can with ease be drawn out of the throat, without the least injury.

It is not uncommon, when cattle are choked with an apple or potato, to attempt to force it down with a whip stalk or stiff rope, and when it comes in contact with the obstruction, the pressure of the gas or compressed air is so great that it cannot be forced down. By using the probang and letting down the rod with the screw, and forcing the worm or screw into the potatoe or apple, and withdrawing the probang, the obstruction can be removed without difficulty. But it must be remembered, in cases where cut turneps have been fed, it is very dangerous to use much force in passing the substance into the stomach, although it is impossible to lacerate the *æsophagus* with passing the bulb, if it was larger; but the hard edges of the rough parts of the turnep may, by too much pressure, injure the lining of the *æsophagus*, which is the most tender membrane of the animal, which, if injured by improper force, the animal will never do well afterwards.

There is also a small wooden rod to put in place of the iron one, in order to stiffen the tube, by which, if the obstruction be small, it can be forced downwards into the stomach.

The common causes of hoven cattle is by eating greedily of wet grass, green clover, turnep tops, or any succulent food. The air contained in the hollow stalks expands so rapidly as to obstruct the organs of respiration, and the animal dies by suffocation, unless relieved. These facts are too well known by farmers to require any further comments from me; and during the few years' practice in breeding and feeding cattle, and witnessing the severe losses sustained by the farmers from these causes, has induced me to notice the probang made by Mr. Caley.

This instrument is equally well adapted for hoven cattle; and the bellows, (fig. 17,) which can be attached to one of the bulbs by means of a screw, acts as a stomach pump, which is intended for the relief of gripes and removing obstructions of the bowels of animals that cannot relieve themselves.

The following are his directions for using the probang in cases of hoven: as soon as the animal is discovered to be ailing, lose no time in passing the probang, with the wooden box in it; but if the stomach is much distended, the partly digested food will stop the holes in the bulb, and prevent the gas from escaping through the tube; in which case, move the probang with the rod up and down, six or seven inches, a few times, which will generally give vent to the gas; then withdraw the rod, and move the probang up and down freely, which will soon give relief. But should this not be effectual, the rod may be passed again, and the bellows applied to the probang, and the gas pumped out. Should there any thing more than gas be received into the bellows, the nozzle may be unstopped, and the contents discharged through it.

In order to use the probang with safety, it is necessary to have something to keep the mouth open, and to prevent the animal from cutting the tube with the teeth. For this purpose, Mr. Caley recommends a mouth piece made of wood, (fig. 16,) with straps on each end, to buckle around the horns.

Mr. Caley informs me that he has lately had an opportunity of testing one of his probangs, and it answered the desired purpose for which it was intended, and proved all that has been said about it. The obstruction

was removed without difficulty, and the gas or air pumped out of the stomach with the bellows. No farmer, he says, who keeps cattle need despair, for he is conscious all obstructions can be removed, if properly used.

Every breeder or owner of cattle, whether of the improved or common breed of the country, should have one of "Caley's *Æsophagus Probangs*," or at least every neighborhood should possess one, as it might be the means of saving hundreds of cattle that are lost to community.

One of these instruments may be found at Mr. Thorburn's agricultural and seed store, where it may be examined, and Mr. T. will receive orders for them, as they will not be made except when ordered. Price \$7.00

CALEY N. BEMENT.

Three Hills Farm, Dec. 1, 1841.

GRAVEL IN THE HORSE.

Messrs. GAYLORD & TUCKER—I have for some time entertained the opinion that very erroneous notions exist in relation to the nature and more particularly the cause of the disease called "gravel" in horses' feet. The general sentiment, so far as I have apprehended it, appears to be that this disease is caused by dirt or gravel insinuating itself through the hoof (in a passage caused by a nail in shoeing, or a crack,) to the quick or soft parts within the shell of the foot or hoof. Now without assuming positively to deny that dirt or small stones ever did cause the gravel, I think the facts will bear me out in saying that such is very rarely the case. If gravel gets into an abscess in the foot, and is discharged with the matter, it is as a result of the inflammation and subsequent ulceration, and not as a cause of that inflammation.

The disease in the human system which "gravel" most nearly resembles, is "stone-bruise." The outer skin of a person's foot, accustomed to running barefoot, becomes extremely thick and hard. Does any person suppose that in order to produce a "stone-bruise," it is necessary for dirt to get through this hard skin, following some puncture by a nail or otherwise? Not at all: on the contrary, when the individual strikes his foot strongly against the frozen ground, a sharp stone or stump, the hard skin, (or hoof, as it may be called,) is pressed strongly against the quick or soft parts underneath. The result is an inflammation of those soft parts, followed by the formation of matter. The outer skin being so indurated over the matter, it cannot escape directly, but is thus obliged to burrow along until it escapes at the edge of the hard skin, unless otherwise evacuated. Precisely so in relation to "gravel" in horses' feet. In consequence of the animal's striking his foot strongly upon a frozen hub, or sharp stone, being pricked by a nail in shoeing, being stepped on by another horse, or any similar cause, or some original defect in the foot, not easily accounted for, the quick or soft part within the hoof is injured, it inflames, and matter or pus is formed. Now how is this matter to escape? It cannot find vent through the hoof, neither at the bottom nor at the sides of the foot. The only alternative is for the matter to burrow along the inside of the hoof to the top, and thus escape. The proper treatment undoubtedly is, to pare the bottom part of the hoof away, until you reach the matter.

I have certainly, I admit, seen matter escape from such an opening, and with it, dirt, but it was dirt that had a moment before been permitted to enter through the bungling operation of the smith. Thus, as was said above, the dirt being found there, was the result of the "gravel" or inflammation in the foot, and not its cause. If the above remarks should have the effect to induce thought on the subject on which they treat among some of your subscribers, in relation to a disease very frequent in one of our most useful animals, the design of a reader and subscriber will be fully answered, who, for the present, will subscribe himself

Monroe, Orange Co. N. Y., Dec. 4, 1841.

VALUABLE RECIPES.

Messrs. GAYLORD & TUCKER—The following are at your disposal:

OPODELDOC, OR CAMPHORATED SOAP LINIMENT.—Take common white soap, 3 ounces, camphor 1 oz., oil of rosemary, oil of orange, of each 1-8 ounce, alcohol, 1 pint; cut the soap fine, and with a gentle heat dissolve it in the alcohol in which the other articles had been previously dissolved. Pour into wide mouthed vials or jars, to cool.

If LIQUID OPODELDOC is preferred, take 2 ounces of Castile soap, in place of 3 ounces of common soap. N. B. Troy ounces are designated. If not practicable to have the articles weighed by that standard, bear in mind that the Troy ounce is nearly equal to 1 1-9 ounce Avoirdupois.

Opodeldoc, made according to the above recipes, is altogether superior to that usually sold in vials, at exorbitant prices.

BRITISH OIL.—Take spirits turpentine and linseed oil, of each half pint; oil of amber, oil of juniper, and mineral tar, of each 1 gill.

OIL OF SPIKE, or a mixture commonly sold under that name, is nothing but sp. turpentine, mineral tar, and some essential oil, added in various proportions. The following is a good recipe for its preparation: take sp. turpentine, 1 pint, mineral tar, 1-2 pint, oil of amber, 3 oz., oil of rosemary, 1 oz.

Burling Green. O., 1841.

Silk Culture in the United States.

PROGRESS OF THE SILK CULTURE.

BELIEVING, as we do, that the production of silk has taken a firm hold, as an essential element of national prosperity, and that it is destined to rapidly increase in this country, we shall feel a pleasure in recurring to the subject frequently, and keeping the readers of the Cultivator apprised of such important facts as may interest those who have already engaged, or are preparing to engage, in the business. There was the last year, as there will always be, on the introduction of a new branch of domestic industry, some failures and some disappointments, but as a whole, a vast increase of production of silk, over any former year, took place, and the failures, in proportion to the numbers engaged, far less than formerly. The greatest cause of failure has been, attempting to feed too many worms from a given quantity of mulberries, which has produced disease, and in some cases an almost total loss of the silk crop. We are convinced, however, that were the full amount of the crop of 1841 to be made known, it would surprise all, and convince even the most skeptical that we are able to grow our own silk, as well as our own cotton and wheat. In those States where a premium on silk is paid by the State, an approximation to the amount produced may be made, although it must always fall below the actual amount, as multitudes do not present their claims for reward.

The following instances, collected from various sources, will show what was done in a few places the last season. In the county of Monroe, N. Y., 1,538 lbs. of cocoons, and 29 lbs. of reeled silk, received the bounty of the State, and the actual amount very much exceeded this, as many who grew considerable quantities made no claims. In the county of Chautauque, (as appears from the Chautauque Silk Journal, a small monthly paper published by Mr. Lord, at Dexterville in that county,) more than seventy bushels of cocoons were raised last year, and those employed in the business were so satisfied with their success, that many were making arrangements to greatly enlarge their operations the present year. In Cuyahoga co., Ohio, the production of silk rose from 300 lbs. in 1840, to more than 2,200 lbs. in 1841, and the business will be greatly increased during the present year. More than 2,000 yards of beautiful silks, velvets, &c. have been manufactured at Mount Pleasant, Ohio, during the last two years, and a rapid extension of the works is contemplated. As yet, however, the greater quantity of silk produced has been made into sewing silks, and there is a probability that this important drain upon the country will soon be checked by an abundant home supply. At Economy, Pa., the Misses Rapp have produced at their establishment 3,500 lbs. of cocoons, which gave about \$1,800 worth of raw silk. We have seen no estimate of the quantity produced at some of the most extensive establishments in the United States, such as those of Northampton, New Jersey, Philadelphia, &c., but the above will give some idea of the progress made in a single year. Those engaged in the silk culture must not expect to enrich themselves at once. Caution in commencing, and experience in progressing, will ensure eventual success. From what we can learn, the Peanut variety of the silk worm will prove the most profitable to the silk grower. Mr. Lord says that in his reeling, he has found the Two Crop and Mammoth White to yield about seven ounces of reeled silk to the bushel of cocoons; the White Sulphur from ten to fourteen ounces, though in one instance, he reeled eighteen ounces to the bushel; from the Peanut, he has reeled invariably twenty ounces to the bushel, and there was less waste with this French variety than any other.

The law of New-York, passed May, 1841, gives a bounty of 15 cents on every bushel of cocoons, and 20 cents on every pound of reeled silk produced in the State until 1846. This bounty will go far towards defraying the expense of cultivation, where children are used to gather the foliage for the few weeks of feeding, as they can easily do where the Multicaulis is used. Fifty thousand worms, kept healthy and well fed, will make fifteen bushels of cocoons, worth some sixty dollars, independent of the state bounty.

Such of our readers as are interested in the silk culture, will rejoice to learn that we are to receive a series of articles on this subject, from G. B. SMITH, Esq. of Baltimore, a gentleman who has probably a more intimate knowledge of the business than almost any other individual in the country, the first of which we publish this month.

CULTURE OF SILK.

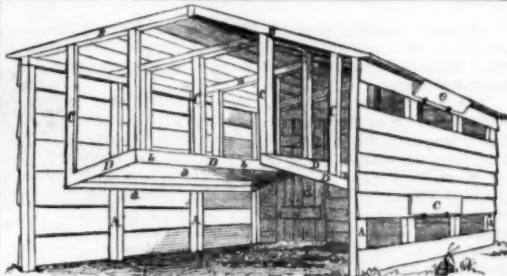
EDITORS OF THE CULTIVATOR.—I am much pleased with your determination to devote a portion of the pages of the Cultivator to the culture of silk, and accept promptly your invitation to write a series of articles containing "plain, practical directions, such as are necessary for the multitude of farmers who are just beginning the business in a small way." I will promise that I am preparing a Manual on the Culture of Silk, adapted to the every day wants of the same class of people, and which shall also be adapted to the most extensive range of business, embracing all the improvements recently made in Europe, and all the information I shall have been enabled to collect up to the time of publication. My plan of conveying information on silk culture is, to adopt the plainest terms of the English language

in all I write; the advantage of this is obvious, for there are none so learned that they cannot understand the subject in a plain dress, while if written in the technological terms of science, none but the scientific can profit by it. In the course of the series, I will embrace the whole subject of silk culture, and will endeavor to say all that can be necessary to the production of first rate reeled silk; but, owing to the season of the year when the series will commence, it will be necessary to adapt each article to the necessities of the season, instead of commencing at the beginning of the subject, that advantage may be taken for the use of the coming season. For this purpose, I will take up the queries contained in your letter of the 1st inst.

1. "The killing of the worm in the cocoon" will bear postponement to a later period. I will say here now, however, that killing the worm (chrysalis) with the vapor of camphor, has been found a most excellent and economical mode. 2. The best kind of worm is undoubtedly the Peanut. As this is the proper season for obtaining eggs, I will remark that there are two families of silk worms; the one that forms oval or egg shaped cocoons, the other that forms peanut shaped cocoons. The former has been from time immemorial the insect that furnished the silk of the world, until within the last ten years. This family has a great number of members or varieties. The old fashioned sulphur color cocoon is the parent of one branch of the family; the old fashioned orange color cocoon, sometimes called the Spanish worm, is the parent of another; and the old white cocoon is the parent of a third. Each of these families has numerous sub-varieties, and numerous names for each variety. There are the Large Sulphur, the Mammoth Sulphur, the Large Brown, the Italian Grey, the Two Crop Sulphur, &c. &c. of the first. The Orange or Spanish has not met with sufficient favor to induce division into varieties, or the invention of new names. The third: these are the Mammoth White, the Connecticut White, the Two Crop White, &c. The old sulphur colored cocoon variety is the best of the whole, and the only one of the tribe of egg shaped cocoons that can be recommended. The Peanut varieties, named from a resemblance of the shape of the cocoon to the peanut, (or the fruit of the *Arachis hypogaea*), has two divisions, the Large and the Small Peanut; these are divided into varieties. The Large Peanuts have the *Mirabel jaune*, or Mammoth Nankeen Peanut, the *Lina mirabel*, or Mammoth White Peanut. These two I consider the very best of silk worms under all circumstances. The silk is very fine, the worms large and robust, the cocoons uniformly well constructed and easily reeled, and the product fully equal to that of any other at all times, and generally much more. The Small Peanuts are the common Nankeen and White. They are an excellent variety, nearly equal to the Large Peanuts in all respects, and when the cocoons are to be transported to any distance, superior to all others, owing to the small size of the cocoon in comparison to the quantity of reeled silk they produce. A bushel of the small Peanuts will generally contain from 3,500 to 4,500 cocoons, and will yield 20 to 22 ounces of reeled silk of the finest and best quality. The egg shaped varieties generally require only from 2,500 to 3,500 cocoons to the bushel, and yield from 12 to 16 ounces of silk to the bushel. The difference between the two families consists in the loose, flimsy structure of the egg shaped cocoon, and the thick, compact structure of the Peanut. The Peanuts are also generally more robust and hardy, and not so liable to disease as the egg shaped. The cocoons of the Small Peanut do not reel quite so easily as the large ones, or as the egg shaped, owing to the firmness of their structure. I should always recommend the Peanut, either large or small, in preference to any other kind.

The best kind of mulberry is the Multicaulis, the next best the *Canton*, (called in France the *Elata*), the next, any of the varieties of the White mulberry. The Multicaulis must, however, in northern latitudes be planted on high, dry, rather poor land, exposed to the north; it will not answer if planted on low, rich soils, or at least the leaves are subject to become too succulent for the worms, and the trees to be injured by winter. I shall treat this subject more at large hereafter.

"The improvement of frames" is now in proper season, as preparation should now be made for them. The best frames I know of are made as follows: take inch and a quarter plank, good stuff, saw it into strips an inch and a quarter wide; cut these strips into pieces 3 feet long; put four of them together, by proper fastenings at the corners, into a frame 3 feet square; then take sawed laths and set them edgewise, an inch and a half apart, in the frame. The best way is to saw into the side of the two opposite side pieces of the frame, and make grooves one-fourth of an inch deep, just large enough for the ends of the laths to fit in; then drive a brad through the side piece into the end of the lath, to hold it in its place. This will form a frame three feet square. They can be made easily by any man, and where there is a steam saw mill or circular saw, the stuff can be got sawed very cheaply, and the frame, when done, will not cost more than plain board shelves. The supports of these frames are made as follows: take inch and a quarter plank, eight inches wide, long enough to reach from the floor to the ceiling, and nail upon both sides cleats an inch and a quarter wide and thick; (pieces from the strips prepared for the frames are proper for the cleats.) Place the cleats a little more than an inch and a quarter apart, from end to end of the plank, on both sides. Set



TILLINGHAST'S COCOONERY.—(Fig. 18.)

up these supports three feet apart in the clear from one end of the room or cocoonery to the other, in rows. You can then slide in the frames between any two cleats on each side, and place five or six frames between every two supports. The object of putting cleats on the supports from top to bottom, is, that the frames may be placed near together or farther apart, at pleasure. The supports should be well fastened to the floor and to the ceiling. When feeding worms, an extra frame, with paper laid on it, may be kept between every two feeding frames, for the purpose of catching filth that may fall from above. For this purpose, a considerable number of frames should be provided more than sufficient to feed worms on. In the course of these papers, the use of these frames will be particularly alluded to, and this in time for the season. My next paper will be more instructive.

GIDEON B. SMITH.

Baltimore, Md., Jan., 1842.

FEEDING SILK WORMS.

MESSRS. GAYLORD & TUCKER.—I send you herewith a drawing of my cocoonery, (fig. 18,) noticed at p. 167 of your last vol., together with the description, as given in my letters patent. The above cut represents a section consisting of one end of my cocoon room. A A is a part of the posts or studs. B B is a part of the rafters. The feeding frames which are to support the worms upon shelves, when first placed there, and which are to sustain the trees and branches after the shelves are removed, are suspended from the rafters so as to stand about two feet and a half or three feet from the ground. C C represent strips of wood nailed to the rafters at their upper ends, and to the side timbers. D D, of the feeding frames at their lower ends. These feeding frames I have made four feet wide, and eighteen or twenty feet, more or less, long, there being an alley or space way between them and the sides of the building, of two feet six inches, and along the middle of the building an alley or space of about five feet between the frames. At every eighteen or twenty feet, more or less, I leave a space of about five feet across the frames, to allow of passing from the middle to the side alleys, and of taking a hand cart or other vehicle from place to place. The frames D D are made open, consisting only of side and end pieces, as they are to receive the shelves and worms from the other apartments after the fourth moulting. These shelves are to be attached to the under side of the feeding frames, by grooves, cleats, and buttons, hooks, or other suitable means. The shelves used in the feeding room, where the worms go through their first stages, are made of thin boards, say half an inch thick, and are capable of being removed in sections with the worms upon them, and they must be of such width as to adapt them to the frames in the cocoon room. A section of these shelves is shown at a a, attached to the under sides of the frames D D, by cleats, hooks, or other devices, as at b b. When the worms have been so disposed of, I take strips of wood, say of an inch square and four feet and somewhat upwards in length, and place these across the frames D D, resting upon their upper edges. These may stand a foot or two apart, according to circumstances. Upon these I lay the trees and branches, covered with fresh foliage. The worms will soon leave the shelf and ascend upon the trees, and when they have done so, the shelves are let down, by unhooking or unbuttoning them, and are removed off of the way. The worms have then a perfectly free circulation of air, and the litter from them falls unobstructed on to the ground, and may be swept out at any time. For the convenience of doing this, and for perfect ventilation, I let the lower board of the sides of my cocoon room constitute shutters, which are hung by hinges or otherwise to the boards above them, as at c. I make similar openings in my weather boarding, near to the eaves and along the whole building, to which I adapt shutters, as at d. d represents an end door. The worms, after feeding upon the leaves, will spin their cocoons upon the twigs and branches of the trees, and that in the most perfect and beautiful manner; and what is particularly remarkable, they will never, when thus accommodated, form double cocoons, which so often become sources of loss in the spinning, upon the kinds of apparatus heretofore employed for that purpose. The cocoons have much less flow upon them than is usual, and can be very readily gathered without injuring them, although they are so thickly deposited that I have gathered fifteen pounds and a half of good cocoons upon a space measuring four feet in width and five and a half in length. The approach of mice, so frequently destructive of the worms and the cocoons,

is effectually guarded against by the suspending of the frames in the manner described, and by the addition of a shelf surrounding each of the suspending strips towards their upper ends.

The temperature should not vary far either way from eighty degrees in the nursery room, and through the different stages of the worm. A thermometer is necessary to govern the temperature. Fresh foliage should always be given to worms. Young and tender leaves must be given to young and tender worms, and should be removed from their litter as often as their periods of moulting. Picked leaves and small branches, with their foliage, may be fed in the nursery room. Fine slaked lime should be sifted upon worms frequently. It absorbs moisture, and purifies the atmosphere; is a good preventive, (but not the cure all,) of disease originated before the worm existed. The most convenient sized shelves I find is four by two and a half feet, fitted to rest on cleats, upon frames to contain about six shelves each, placed about one foot apart. Worms can be fed very thick upon those shelves. Soon as they revive from their last moulting, the shelves should be removed with the worms and litter to the feeding frame, as described in the plate. The strips of wood, &c., should be surrounded at their lower ends, with a board of 8 or 10 inches wide, for the accommodation of laying on trees and preventing them from falling off, to be fastened by buttons, and removed when the cocoons are to be gathered. The building should be on an elevated spot; should be tight when the doors and shutters are closed, to guard against sudden changes of weather; the atmosphere that is most agreeable to those employed is most congenial to the worm. The *Morus multicaulis* of one year's growth is the most convenient to feed upon this frame. The trees should be planted four feet between the rows, and as thick as they will grow from layers in the rows. Trees that stand out through the winter unmolested, when full of foliage, should be cut near the ground. The trees should be laid lengthwise of the frame when feeding, three days in succession, to form a foundation, that the worms may not easily fall through. After the third day, the shelves must be removed, and the trees should be laid across the frame, and continue to cross the trees, that they may be open and airy. Care should be taken that foliage is not laid on in heaps, or faster than the worms consume it. Trees may be cut twice the same season without injury to the roots, and will produce as much foliage through the season as if plucked from their branches. We design to cut one-half of our plantation yearly. This will enable us to feed altogether of one year's growth upon our frame. Healthy worms will always keep uppermost, attached to the trees and branches, until through feeding, not inclined to ramble at all, but go directly down into the brush and form their cocoons. Diseased worms will be sure to find their way through to the ground, and the sooner the better. Unless the worms all go down to spin at one time, which is not often, the floss of those that commence spinning first catches some of the droppings of those above them, and most of the floss is unfit for use. This is of no consequence in comparison to the many advantages derived from this mode of feeding, for we hardly consider the floss, when clean, worth attention.

We have five acres of mulberry, thickly planted, and a sufficiency of good eggs, we believe; and if we do not succeed in feeding 1,000,000 next season, with the help of two men, and two boys ten years old, we shall fall short of our calculation, and be very much disappointed. And we are now ready to testify to all that may read the foregoing, that all the difficulty and anxiety so attendant upon the last stage of the silk worm, in other modes of feeding, in this way is entirely removed, and has become the most agreeable and interesting employment that we were ever engaged in.

Norwalk, O., Jan. 4, 1842.

J. B. TILLINGHAST.

ALBANY NURSERY.

THE proprietor of the above establishment would respectfully inform the public in general, that he has associated with him Jesse Buel, formerly proprietor of the Cultivator, in the nursery business, and that they have now on hand a large and desirable assortment of FRUIT TREES, (most of which were selected by the late Jesse Buel,) FOREST TREES, ORNAMENTAL AND FLOWERING SHRUBS, GREEN HOUSE PLANTS, &c., &c., which they are prepared to dispose of on as reasonable terms as they can be purchased elsewhere. They have likewise a good assortment of Dahlias and Herbaceous Plants, and a very extensive assortment of Hardy Roses, selected from the best European collections, nearly all of which have flowered in our nursery.

The above nursery is situated about two miles west of the city, on the rail road. All orders must be addressed to the proprietors, JESSE BUEL & CO., Albany Nursery, or be left at the store of WILLIAM THORBURN, Broadway, Albany.

February 1, 1842.

TILLINGHAST'S COCOONERY.

FOR more particular information, and in answer to many letters of inquiry, in relation to my patent cocoonery, I here give my terms of sale. The sum of ten dollars is required at the time a deed is executed, for the privilege of using three hundred square feet of frame, which is sufficient to feed 800,000 worms in one season in this latitude, and in the same proportion for any number of feet required. County and town rights may be obtained much cheaper in proportion to their territorial limits; situations and circumstances always considered, and one-fourth of the consideration in all cases must be made, at the time of sale, and a credit of some years for the balance, with undoubted security, will be given if necessary. The price will be nothing less than one hundred dollars for any county in the United States.

N. B. All letters or communications for information, must be post paid, to insure attention.

Norwalk, (Ohio), Jan. 18, 1841

The New-York Market.

MONTHLY REPORT FOR JANUARY, 1842.

(Prepared for THE CULTIVATOR.)

COTTON.—In the fore part of the month, owing to the demand for shipment, prices were firm, and a disposition was evinced by holders to advance; but latterly, although the demand for export has rather increased than receded, the arrivals were to such extent as to produce a tendency in prices to decline. The sales up to the 22d, during the month, amounted to about 14,000 bales, and the exports, up to the 19th, were as follows:

Giza, Britain,	3,904 bales.
France,	3,715 "
North of Europe,	251 "
South of Europe,	1,743 "

Making a total of 10,816 bales.

The advices by the Britannia had no effect upon the market, although from the firmness of holders, prices are steady. Considerable new cotton has arrived, but the quality is moderate. The following are the quotations:

	January 1st.	January 22d.
New Orleans,	7 1-2 @ 11	7 1-4 @ 11
Mobile,	7 1-2 @ 10 1-2	7 1-4 @ 10 1-2
Upland and Florida, 7 @ 9 1-2	7 @ 9 1-4	

FLOUR AND MEAL.—Prices during the month have been fluctuating, although but merely nominal. Buyers have evinced a disposition not to purchase at the rates asked by holders, and the market for all descriptions has consequently been extremely feeble and dull. The stock on hand is moderately large. The advices by the Britannia represented the European markets generally as without change since the previous advices, and of course had no effect upon the market here. There has also been little disposition shown to speculate. The exports of wheat flour, from the 1st to the 19th of January, have been about 25,875 barrels. Genesee has receded from \$6 @ \$6 12 1-2, the rate at the first of the month, to \$5 94 @ \$6; Troy from \$6 to \$5 87 1-2 @ \$6; Michigan from \$5 7 1-2 @ \$6 to \$5 75 @ \$5 87 1-2; Ohio has been stationary, at \$5 87 1-2 @ \$6; Georgetown and Alexandria, \$6 12 1-2 @ \$6 25 to \$6 @ \$6 12 1-2; Baltimore Howard street, although rates have fluctuated, is the same as at the first of the month, \$6 12 1-2 @ \$6 25; Richmond City Mills, \$7 50 to \$7 25 @ 7 60. There has been an advance in Rye Flour from \$3 75 to \$4. Jersey Corn Meal is selling at \$3 12 1-2; Brandywine at about the same in bbls., and \$14 @ 14 50 in hhds.

GRAIN.—There has been a decline in almost every description during the month. The sales have been small, and there is much more readiness on the part of sellers than buyers. The decrease in the demand for Whiskey, and the quantity arrived of distilled from New Orleans, have tended greatly to depreciate prices. A good deal of Southern Wheat has arrived, but being in fewer hands, the fluctuation in price has not been so great. The prices from the 1st to the 22d of the month, have varied for Genesee, \$1 25 to \$1 22 @ \$1 25; Southern, \$1 20 @ \$1 25 to \$1 20. Northern Rye, 75 to 72 cents, about the middle of the month, but it has resumed its previous rates again. Jersey and Brandywine Corn, 66 @ 68 cents per bushel to 62 @ 62 cents, all measure; Southern, 62 @ 66 to 60 cents, all weight; Ohio, 68 to 66. North River Barley, 75 to 74 cents. Northern Oats have advanced from 45 @ 50 to 50 @ 52 cents; Southern have been stationary, at 44 @ 45; New Jersey, 40 @ 45 to 40 @ 48 cents. The export of corn from the 1st to the 19th of the month, was 3,803 bushels.

PROVISIONS.—The transactions in most descriptions are extremely limited, and the market is dull and heavy. In the first part of the month, prices were firm, with a moderate demand; but latterly there has been nothing doing in Beef or Pork, and prices are but nominal, with a large stock on hand. At present, the sales are only in lots for city use, or shipment. Beef has remained, without change, at \$7-60 @ \$8-25 for mess, and \$4-90 @ \$5-25 for prime. Pork has declined, from \$9-00 @ \$10-25 for mess, to \$8-00 @ \$10-00, and prime from \$6-75 @ \$8-25, to \$6-00 @ \$8-00. For Lard there is a fair demand for export, although prices have receded from 5 1-2 @ 8 c. per lb., to 5 @ 7 1-2 c., owing principally to the large receipts from New Orleans in the second week of the month. In Butter there is nothing doing, and prices have not varied. The quotations are, for prime 20 @ 21 c. per lb.; western dairy 15 @ 17 c.; ordinary to good 10 @ 14 c. Cheese, is in moderate demand for shipment, with a small supply on hand. Prices have advanced from 6 1-2 @ 7 1-2 c. per lb. at the first of the month, to 7 @ 8 c. Smoked Hams are selling at 8 1-2 @ 9 3-4 c.—a decline from 9 c., at the first of the month. Smoked Beef 6 1-2 @ 7 c. The exports from the 1st to the 19th are as follows:—

Beef,	1,041 brls.
Pork,	3,456 "
Lard,	4,929 kegs.

TOBACCO.—Has been very inactive during the month, and sales have been very limited. During the last week there has been a little more activity, and prices generally have receded a little. The quotations are as follows:—Richmond and Petersburg declined from 4 @ 8 c., to 3 1-2 @ 7 c.; North Carolina, 4 @ 6 c., to 3 1-2 @ 6 c.; Kentucky 5 @ 9 c., to 3 3-4 @ 9 c.; St. Domingo, 15 @ 20 c., to 12 1-2 @ 20 c. In other descriptions prices remain without change, viz:—Cuba, 12 1-2 @ 20 c.; Manufactured, No. 1, 12 @ 15 c.; No. 2, 10 @ 11 c.; No. 3, 7 @ 16 c.; 32 lumps, 16 @ 20 c.; Ladies Twist, 16 @ 20 c.; Cavendish, 10 @ 40 c. From the inactivity, prevailing prices are but nominal, and there is no grounds to anticipate any improvement, either in demand or prices. The inspections and stock on hand, are somewhat less than during the same period last year.

WOOL.—There has been no transactions worthy of note during the month, and prices, therefore, are merely nominal. There has not been the slightest variation since last month. The quotations are, for American Saxony, 40 @ 42 c.; for American full blooded Merino, 34 @ 36 c.; for half blood 3-4 Merino, 30 @ 32 c.; common to 1-4 do, 18 @ 22 c.; superfine pulled, 36 @ 37 1-2 c.; No. 1, 32 @ 34 c.; No. 2, 25 @ 27 c.; South American washed, 6 @ 8 c.; picked, 16 @ 18 c.; do. unwashed, 5 @ 7 c.; African, 7 1-2 @ 12 1-2 c.; Smyrna, 9 @ 14 c.; Mexican, 11 1-2 @ 12 1-2 c.

ADVERTISEMENTS of stock, implements, fruit trees, &c., will hereafter be inserted once, and only once, in the Cultivator, the charges for which will be at the rate of \$2 00 for each 100 words. No advertisement inserted for less than \$2 00 however short it may be.

ALBANY SEED STORE, AND AGRICULTURAL REPOSITORY.

THE subscriber offers for sale a large assortment of FRESH GARDEN, FIELD, AND FLOWERING SEEDS; also, a large assortment of FRUIT AND ORNAMENTAL TREES AND SHRUBS, with a general assortment of FARMING IMPLEMENTS, viz: Green's Straw Cutters, with 12, 18, and 24 knives each. Price, 12 knives, \$25; 18 do., \$28; 24 do., \$31; Armstrong's do., \$23; Gilson's do., \$20; Drill Barrows, from \$2 to \$10 each; Cultivators, \$5 to \$10 each; Bull Rings for Cattle; Vegetable Cutters, \$10 to \$15 each; Plows at all prices. W. THORBURN, No. 39 Broadway.

Albany, February 1, 1842.

ACKNOWLEDGMENTS.

From Wm. SWINER, Esq., Pomaria, S. C., the *Transactions of the S. C. State Agricultural Society*, with the Oration of Gen. Hammond, delivered at its last meeting.
From Rev. HENRY COLMAN, his *Fourth Report on the Agriculture of Massachusetts*.
From Wm. H. RICHARDSON, Esq., Richmond, Va., the *Proceedings of the Henrico Ag. and Hort. Society*.
From Prof. JAMES HALL, State Geologist of New-York, his *Notes on the Geology of the Western States*.
From J. S. SWINER, Esq., Washington, A Christmas Gift to the *Farmers of the United States*, by Mr. S.
From S. A. LAW, Esq., Meredith, N. Y., his *Address to the Delaware Ag. Society*, at its last meeting.
From R. H. WILLSON, Esq., the *Constitution and By-Laws of the Ohio and Brooke Ag. Society*, Va.
From Capt. R. HARDWICK, Sparta, Ga., the *Proceedings of the Farmers' Club* of that place.
From the EDITORS, London, the weekly nos. of *The New Farmer's Journal* for December. From other friends in London, we have regular files of the *Mark-Lane Express*, and the *Gardner's Chronicle*, together with *The Veterinarian*, *The Farmer's Magazine*, and *The Farmer's Encyclopedia*, for January.
From the EDITORS, Silliman's *American Journal of Arts and Science*, for January.
From J. W. CARY, Esq., Johnstown, an ear of *Rocky Mountain Corn*, each kernel of which is enclosed in a separate envelope.

NOTICES TO CORRESPONDENTS, &c.

We have received, during the last month, besides those published in this paper, communications from the following:—John Harold, J. C. Robertson, N. N. D., G. H. Chrisman, Enquirer, L. Durand, J. A. S., J. Horsfield, S. D. Martin, C. L. Root, A. Suffolk Co. Farmer, Wm. Kitchen, Praries of the West, J. Bowen, W. H. & F. J. Scott, M. Quinby, H.W., N. R. French, J. W. Crisfield, G. S. Wright, V. S. J. Ives, T. Goodsell, Columbia, A. Subscriber, Richmond, G. Cook, G. W. Grant, A. Farmer, G. Butler, C. Ingalls, J. W. Smith, X. Henry Long, E. S. Himman, Geo. Woodfin, A. Farmer of R. Island, Wm. Makinster, and A. Farmer's Wife.

CHESS.—We have several articles on the subject of the supposed change of wheat, oats, &c., to chess; but, as the subject has been thoroughly discussed in the two last vols., we must decline opening our columns again to the controversy, at least, for the present.

"N. N. D."—Though we have had the drawing engraved for his communication, we have not been able to make room for it in this number, and it is now so late in the season, we may, perhaps, let it lie over till autumn.

"RICHMOND."—We fear this communication, though appropriate to our pages, will have to give place, for the present, to those of a more strictly practical character.

The drawings furnished by S. W. JEWETT, J. HORSFIELD, R. NORTH, Jr., J. HAROLD, and A. FARMER, are in the hands of the engraver.

The portrait of "*Irish Beauty*," owned by J. S. NORTON, Rockford, Ill., is not sufficiently accurate for the engraver. It wants the life-like character of the animal. We should be glad to get a good drawing of an Irish Grazer.

The portraits of the Short Horned Bull and Berkshire Sow, furnished by the Messrs. SCOTT, are good; but we have given so many of these animals that we have concluded, hereafter, only to give the portraits of Premium animals of these breeds, unless the owners will be at the expense of the engraving.

"The person who advertises for a situation with a practical farmer, may hear of a place, which cannot fail to suit him, on application at this office.

"If we hear of a situation which will answer "C. I.," we will let him know.

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THE BACK VOLUMES

Of the Cultivator may be had of the following Agents:
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Judah Dobson,	Philadelphia, Pa.
G. B. Smith,	Baltimore, Md.
Frank Taylor,	Washington, D. C.

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